Journal of Ethnopharmacology, 30 (1990) 323–358
Elsevier Scientific Publishers Ireland Ltd.

CONTENTS — VOLUMES 11–30

Volume 11 (1984)

HISTORICAL REVIEW PAPER

Pharmacognosy: the oldest modern science 1
A. de Pasquale (Messina, Italy)

RESEARCH PAPERS

Fifteen years of study of psychoactive snuffs of South America: 1967–1982 A review 17
R.E. Schultes (Cambridge, MA)

Traditional pharmaceutical practice in Gondar region, Northwestern Ethiopia. 33
W. Abebe (Gondar, Ethiopia)

Some neuromuscular effects of the crude extracts of the leaves of *Abrus precatorius* 49
C. Wambebe and S. Ladele Amosun (Zaria, Nigeria)

Ethno-medico-botanical investigation in Kerala I. Some primitive tribals of Western ghats and their herbal medicine 59
P. Pushpangadan and C.K. Atal (Jammu Tawi, India)

Possible involvement of amine oxidase inhibition in the sympathetic activation induced by khat (*Catha edulis*) chewing in humans 79
P. Nencini, G. Amiconi, O. Befani, M.A. Abdullahi and M.C. Anania (Rome, Italy and Mogadishu, Somalia)

The in vitro effect of grandiflorenic acid and zoapatle aqueous crude extract upon spontaneous contractility of the rat uterus during oestrus cycle 87
E. Bejar, R. Enriquez and X. Lozoya (Mexico, Mexico)

Stem bark alkaloids of *Rauvolfia caffra* 99
A.M.A.G. Nasser and W.E. Court (Yorkshire, U.K.)

BOOK REVIEWS 119

RESEARCH PAPERS

The healing practices of a Peruvian shaman 123
L.E. Luna (Helsinki, Finland)

The concept of plants as teachers among four mestizo shamans of Iquitos, north-eastern Peru 135
L.E. Luna (Helsinki, Finland)

Phytochemical screening of Tanzanian medicinal plants. I. 157
S.C. Chhabra, F.C. Uiso and E.N. Mshiu (Dar es Salaam, Tanzania)

Counter-irritant and other medicinal uses of plants in Ranunculaceae by native peoples in British Columbia and neighbouring areas 181
N.J. Turner (Victoria, Canada)

Medicinal plants used in a Totonac community of the Sierra Norte de Puebla: Tuzamapan de Galeana, Puebla, Mexico. 203
M.A. Martinez Alfaro (Mexico)

Oral hypoglycaemic activity of some medicinal plants of Sri Lanka. 223
E.H. Karunanayake, J. Welihinda, S.R. Sirimanne and G. Sinnadorai (Colombo, Sri Lanka)

SHORT COMMUNICATION
Screening for biological activity of different plant parts of *Tabernnaemontana dichotoma*, known as *divi kaduru* in Sri Lanka 233
P. Perera, D. Kanjanapoothi, F. Sandberg and R. Verpoorte (Uppsala, Sweden and Leiden, The Netherlands)

BOOK REVIEWS 243

RESEARCH PAPERS
A drug used in traditional medicine. *Harpagophytum procumbens* DC. I. Scanning electron microscope observations 245
S. Ragusa, C. Circosta, E.M. Galati and G. Tumino (Messina, Italy)
A drug used in traditional medicine. *Harpagophytum procumbens* DC. II. Cardiovascular activity 259
C. Circosta, F. Occhiuto, S. Ragusa, A. Trovato, G. Tumino, F. Briguglio and A. de Pasquale (Messina, Italy)
Anti-hyperglycaemic effect of an extract of *Myrtus communis* in streptozotocin-induced diabetes in mice 275
M.S. Elfellah, M.H. Akhter and M.T. Khan (Benghazi, Libya)
Effects of the extracts of *Desmodium adscendens* on anaphylaxis 283
M.E. Addy and E.M.K. Awumey (Legon, Ghana)
Ethnopharmacology of some *Buddleja* species 293
P.J. Houghton (London, U.K.)
Non-narcotic orally effective, centrally acting analgesic from an Ayurvedic drug . . . 309
C.K. Atal, M.A. Siddiqui, U. Zutshi, V. Amla, R.K. Johri, P.G. Rao and S. Kour (Tawi, India)
Study of anti-inflammatory activity in the leaves of *Nyctanthes arbor tristis* Linn. — an Indian medicinal plant 319
R.S. Saxena, B. Gupta, K.K. Saxena, R.C. Singh and D.N. Prasad (Meerut, India)
Effect of alkaloids of *Solanum melongena* on the central nervous system 331
S.B. Vohora, I. Kumar and M.S.Y. Khan (New Delhi, India)

SHORT COMMUNICATION
Martinella (Bignoniaceae): A widely used eye medicine of South America 337
A.H. Gentry and K. Cook (St. Louis, MO)
Subject Index — Volume 11 345
Author Index — Volume 11 347
Volume Contents — Volume 11 349

Volume 12 (1984)

REVIEW PAPER
Arrow poisons in South Asia
Part 1. Arrow poisons in ancient India 1
N.G. Bisset and G. Mazars (London, U.K. and Strasbourg, France)

RESEARCH PAPERS
Stimulating actions on ribonucleic acid biosynthesis of aconitines, diterpenic alkaloids of *Aconitum* roots 25
M. Murayama and H. Hikino (Sendai, Japan)
Pharmacopoeia of traditional medicine in Venda 35
H.-J. Arnold and M. Gulumian (Nicosia, Cyprus and Johannesburg, S. Africa)

An ethnopharmacological examination of *Virola elongata* bark: A South American arrow poison 75
W.D. MacRae and G.H.N. Towers (Vancouver, Canada)
Justicia pectoralis: A study of the basis for its use as a hallucinogenic snuff ingredient . 93
W.D. MacRae and G.H.N. Towers (Vancouver, Canada)

BOOK REVIEWS 113

REVIEW PAPER
Kat and its use: An historical perspective 115
A.D. Krikorian (Stony Brook, NY)

RESEARCH PAPERS
Monoamine oxidase inhibitors in South American hallucinogenic plants Part 2: Constituents of orally-active Myristicaceous hallucinogens. 179
D.J. McKenna, G.H.N. Towers and F.S. Abbott (Vancouver, Canada)
Ethnomedicinal plants of Jaunsar-Bawar hills, Uttar Pradesh, India 213
S.P. Jain and H.S. Puri (Lucknow, India)
Medico-ethno botany of Mount Abu, Rajasthan, India 223
M.K. Sebastian and M.M. Bhandari (Jodhpur, India)
Antihepatotoxic actions of papyriogenins and papyriosides, triterpenoids of *Tetrapanax papyriferum* leaves 231
H. Hikino, Y. Kiso, S. Amagaya and Y. Ogihara (Sendai and Nagoya, Japan)

BOOK REVIEW 237

RESEARCH PAPERS
Inventaire pharmacologique general des plantes medicinales Rwandaises 239
M. Chagnon (Butare, Rwanda)
A study of the hypoglucemic effect of some Mexican plants 253
R.M. Pérez G., A. Ocegueda Z., J.L. Muñoz L., J.G. Avila A. and W.W. Morrow (Edo. de México, Mexico)
Anti-inflammatory activity of *Eryngium maritimum* L. rhizome extracts in intact rats. 263
R. Lisciani, E. Fattorusso, V. Surano, S. Cozzolino, M. Giannattasio and L. Sorrentino (Naples, Italy)
Effect of seneciphylline and senecionine on hepatic drug metabolizing enzymes in rats. 271
H.K. Kakrani and G.A. Kalyani (Karnataka, India)
Antibacterial constituents in the essential oil of *Cymbopogon citratus* (DC.) Stapf. . 279
G.O. Onawunmi, W.-A. Yisak and E.O. Ogunlana (Ile-Ife, Nigeria)
Antimitotic activity of strychnopentamine, a bisindolic alkaloid. 287
M. Tits, C. Desaive, J.-M. Marnette, R. Bassleer and L. Angenot (Liège, Belgium)
Investigations on *Dieffenbachia amoena* Gentil. 1. Endocrine effects and contraceptive activity 293
R. Costa de Pasquale, S. Ragusa, C. Circosta and A.M. Forestieri (Messina, Italy)
Folk medicine in Tonga. A study on the use of herbal medicines for obstetric and gynaecological conditions and disorders. 305
Y.N. Singh, T. Ikahihifo, M. Panuve and C. Slatter (Suva, Figi and Nuku'alofa, Tonga)

SHORT COMMUNICATION
A pointer to a new hallucinogen of insect origin 331
E.B. Britton (Canberra, Australia)

LETTER TO THE EDITORS. 335

BOOK REVIEWS 337
MEETING REPORTS 339

Subject Index — Volume 12 345
Author Index — Volume 12. 347
Volume Contents — Volume 12 349

Volume 13 (1985)

EDITORIAL
Introduction of M.H. Malone (Stockton, CA) and T. Plowman (Chicago, IL) as U.S.A. Editors-in-Chief. 1

REVIEW PAPER
A multidisciplinary overview of intoxicating snuff rituals in the western hemisphere 3
P.A.G.M. de Smet (The Hague, The Netherlands)

RESEARCH PAPERS
Pharmacological aspects of selected herbs employed in Hispanic folk medicine in the San Luis Valley of Colorado, USA: I *Ligusticum porteri* (osha) and *Matricaria chamomilla* (manzanilla) 51
G.D. Appelt (Boulder, CO)
Chemical bases for medicinal plant use in Oaxaca, Mexico. 57
B.R. Ortiz de Montellano and C.H. Browner (Detroit, MI and Pomona, CA)
Medicinal plants of the Mapuche 89
P.J. Houghton and J. Manby (London, U.K.)
Antifertility effect of *Citrus hystrix* DC. 105
P. Piyachaturawat, T. Glinsukon and A. Chanjarunee (Bangkok, Thailand)

SHORT COMMUNICATION
Medicinal plants: an approach to the study of naturally occurring drugs. 111
F. Capasso (Naples, Italy)

BOOK REVIEWS 115
ANNOUNCEMENT 119

RESEARCH LETTERS
Preliminary study of ethnobotany in Xishuang Banna, People's Republic of China . 121
P. Sheng-ji (Yunnan, China)
Screening of medicinal plants used by Huastec Mayans of Northeastern Mexico . . . 139
X.A. Domínguez and J.B. Alcorn (Monterrey, Mexico and Austin, TX)
Experimental anti-ulcer activity of *Veronica officinalis* L. extracts 157
M. Scarlet, V. Șandor, M. Tămaș and B. Cuparencu (Cluj-Napoca, Romania)
Muscle relaxant activity and hypotensive activity of some *Tabernaemontana* alkaloids 165
P. Perera, D. Kanjanapothy, F. Sandberg and R. Verpoorte (Uppsala, Sweden, Chiang Mai, Thailand and Leiden, The Netherlands)
Pharmacology of ephedroxanes 175
H. Hikino, K. Ogata, Y. Kasahara and C. Konno (Sendai, Japan)
A drug used in traditional medicine: *Harpagophytum procumbens* DC. III. Effects on hyperkinetic ventricular arrhythmias by reperfusion 193
R. Costa de Pasquale, G. Busa', C. Circosta, L. Iauk, S. Ragusa, P. Ficarra and F. Occhiuto (Messina, Italy)

A drug used in traditional medicine: *Harpagophytum procumbens* DC. IV. Effects on some isolated muscle preparations 201
F. Occhiuto, C. Circosta, S. Ragusa, P. Ficarra and R. Costa de Pasquale (Messina, Italy)
Screening of medicinal plants of Rwanda for acaricidal activity 209
L. Van Puyvelde, D. Geysen, F.-X. Ayobangira, E. Hakizamungu, A. Nshimiyimana and A. Kalisa (Butare, Rwanda)
Cholagogic effect of ginger and its active constituents 217
J. Yamahara, K. Miki, T. Chisaka, T. Sawada, H. Fujimura, T. Tomimatsu, K. Nakano and T. Nohara (Kumamoto, Japan)

SHORT COMMUNICATION
Mangiferin from the root bark of *Salacia reticulata* 227
E.H. Karunanayake and S.R. Sirimanne (Colombo, Sri Lanka)

BOOK REVIEWS 229
CORRIGENDUM 235
ANNOUNCEMENT 237

REVIEW PAPER
Traditional and herbal medicine in the Cook Islands 239
W.A. Whistler (Kauai, HI)

RESEARCH PAPERS
Anti-implantation activity of the fruit of *Lagenaria breviflora* Robert 281
A.A. Elujoba, S.O. Olagbende, S.K. Adesina (Ile-Ife, Nigeria)
Anti-inflammatory actions of tannins isolated from the bark of *Anacardium occidentale* L. 289
M.L.R. Mota, G. Thomas and J.M.B. Filho (Paraíbe, Brazil)
The traditional therapeutic system in Morocco 301
R. Claisse (Rabat, Morocco)
Some visual effects caused by the beverage kava 307
L.F. Garner, J.D. Klinger (Auckland, New Zealand)
Screening of *Trichosanthes kirlowii, Momordica charantia* and *Cucurbita maxima* (family Cucurbitaceae) for compounds with antilipolytic activity 313
C.M. Wong, T.B. Ng and H.W. Yeung (Shatin, Hong Kong)
Studies on medicinal plants of Sri Lanka. Part 14: Toxicity of some traditional medicinal herbs. 323
S.N. Arseculeratne, A.A.L. Gunatilaka and R.G. Panabokke (Peradeniya, Sri Lanka)

Subject Index — Volume 13 337
Author Index — Volume 13 339
Contents — Volume 13. 341

Volume 14 (1985)

RESEARCH LETTERS
Is the *Tecoma stans* infusion an antidiabetic remedy? 1
M. Lozoya-Meckes and V. Mellado-Campos (Mexico)
Natural occurrence of methionine sulfoximine in the Connaraceae family 11
V.L.R. Jeannoda, D.A.D. Rakato-Ranoromalala, J. Valisolalao, E.E. Creppy and G. Dirheimer (Tananarive, Madagascar and Strasbourg, France)

Antihepatotoxic actions of tannins 19
H. Hikino, Y. Kiso, T. Hatano, T. Yoshida and T. Okuda (Okayama, Japan)
Antihepatotoxic actions of gingerols and diarylheptanoids 31
H. Hikino, Y. Kiso, N. Kato, Y. Hamada, T. Shioiri, B. Aiyama, H. Itokawa, F. Kiuchi and U. Sankawa (Sendai, Nagoya and Tokyo, Japan)
Antihepatotoxic principles of *Phyllanthus niruri* herbs 41
K.V. Syamasundar, B. Singh, R.S. Takur, A. Husain, Y. Kiso and H. Hikino (Lucknow, India and Sendai, Japan)
Antipyretic studies on some indigenous Pakistani medicinal plants 45
S.G. Khattak, S.N. Gilani and M. Ikram (Peshawar, Pakistan)
Phytotherapy in the Valnerina Marche (Central Italy) 53
M.L. Leporatti, A. Pavesi and E. Posocco (Rome, Italy)
Some therapeutic uses of several medicinal plants in the province of Terni (Umbria, Central Italy) 65
M.L. Leporatti, E. Posocco and A. Pavesi (Rome, Italy)
Isolation and hypoglycemic activity of panaxans Q, R, S, T and U, glycans of *Panax ginseng* roots 69
C. Konno, M. Murakami, Y. Oshima and H. Hikino (Sendai, Japan)
The medicinal and nutritional properties of *Dahlia* spp. 75
G.R. Whitley (St. Louis, MO)
Effects of *Lythrum salicaria* in normoglycemic rats 83
M. Lamela, I. Cadavid, A. Gato and J.M. Calleja (Santiage De Compostela, Spain)
Effect of *Trichosanthes kirilowii* lectin on lipolysis and lipogenesis in isolated rat and hamster adipocytes 93
T.B. Ng, C.M. Wong, W.W. Li and H.W. Yeung (Shatin, Hong Kong)

SHORT COMMUNICATION
Native American food and medicinal plants. 3. α-Methylene butyrolactone from *Erythronium grandiflorum* Pursh 99
K.B. Diamond, G.R. Warren and J.H. Cardellina II (Bozeman, MT)

BOOK REVIEWS 103

RESEARCH PAPERS
De plantis toxicariis e mundo novo tropicale commentationes XXXIV: Biodynamic rubiaceous plants of the northwest Amazon. 105
R.E. Schultes (Cambridge, MA)
De plantis toxicariis e mundo novo tropicale commentationes XXV: Miscellaneous notes on biodynamic plants of the northwest Amazon. 125
R.E. Schultes (Cambridge, MA)
Indigenous plant remedies in Zimbabwe. 159
F. Chinemana, R.B. Drummond, S. Mavi and I. de Zoysa (Harare, Zimbabwe and London, U.K.)
Chemistry and pharmacology of an ethanol extract of *Bumelia sartorum* 173
R.N. Almeida, J.M. Barbosa Filho and S. Ramnath Naik (Paraiba, Brazil)
Alkaloids from *Macoubea guianensis* seeds 187
L.A. Anderson, N.G. Bisset, J.D. Phillipson and J.L. Zarucchi (London, U.K. and St. Louis, MO)
Preliminary chemical characterization of pharmacologically active compounds in aqueous plant extracts 193
G. Samuelsson, G. Kyerematen and M.H. Farah (Uppsala, Sweden)
High performance liquid chromatography analysis of the furanochromones khellin and visnagin in various organs of *Ammi visnaga* (L.) Lam. at different developmental stages 203
G.G. Franchi, L. Bovalini, P. Martelli, S. Ferri and E. Sbardellati (Siena, Italy)

The geographic origin of the plants most commonly used for medicine by Hawaiians 213
I.A. Abbott and C. Shimazu (Hawaii, U.S.A.)
Recent advances in studies on Chinese medicinal herbs with physiological activity . . 223
X. Ren-Sheng, Z. Qiao-Zhen and X. Yu-Yuan (Shanghai, China)
Isolation and hypoglycemic activity of panaxans I, J, K and L, glycans of *Panax ginseng* roots 255
Y. Oshima, C. Konno and H. Hikino (Sendai, Japan)
Effect of glycans of *Saccharum officinarum* on carbohydrate and lipid metabolism of rats 261
H. Hikino, M. Takahashi, C. Konno, A. Ishimori, T. Kawamura and T. Namiki (Sendai, Japan)
Diuretic activity of Mexican equisetum 269
R.M. Pérez Gutiérrez, G. Yescas Laguna and A. Walkowski (Estado de Mexico, Mexico)
Analysis of a Maasai arrow poison. 273
B.K. Cassels (Stony Brook, NY)
Pratiques ethnobotaniques des populations afars de la moyenne vallee de l'Awash (Ethiopie) 283
E. Le Floc'h, D. Lemordant, A. Lignon and N. Rezkallah (Montpellier, Paris, St. Ouen, France)

SHORT COMMUNICATION
Phytochemical investigation of *Tabernaemontana crassa*. 315
T.A. van Beek, C. de Smidt and R. Verpoorte (Leiden, The Netherlands)

BOOK REVIEW 319
NEWS 321
ANNOUNCEMENTS 323

Subject Index — Volume 14 325
Author Index — Volume 14. 327
Contents — Volume 14. 329

Volume 15 (1986)

REVIEW PAPER
Fertility regulating agents from traditional Chinese medicines 1
Y.C. Kong, J.-X. Xie and P.P.-H. But (Shatin, Hong Kong and Beijing, China)

RESEARCH PAPERS
Gastrointestinal studies of *Pyrenacantha staudtii* leaf extracts 45
C.N. Aguwa and C.O. Okunji (Nsukka, Nigeria)
Traditional medicine in Fiji: some herbal folk cures used by Fiji Indians 57
Y.N. Singh (Suva, Fiji)
The intensely sweet herb, *Lippia dulcis* Trev.: historical uses, field inquiries, and constituents 89
C.M. Compadre, E.F. Robbins and A.D. Kinghorn (Chicago, IL)
Insulin-like molecules in *Momordica charantia* seeds 107
T.B. Ng, C.M. Wong, W.W. Li and H.W. Yeung (Shatin, Hong Kong)

NEWS 119

REVIEW PAPER

Bulgarian traditional medicine: a source of ideas for phytopharmacological investigations 121
V. Petkov (Sofia, Bulgaria)

RESEARCH PAPERS

Pharmacological evaluation of *Dioscorea dumetorum* tuber used in traditional antidiabetic therapy 133
A.S. Undie and P.I. Akubue (Nsukka, Nigeria)

Pharmacological effects of an aqueous extract of *Rhigiocarya racemifera* 145
C. Nze Aguwa (Nsukka, Nigeria)

Effects of *Lythrum salicaria* extracts on hyperglycemic rats and mice 153
M. Lamela, I. Cadavid and J.M. Calleja (Santiago de Compostela, Spain)

Prostaglandin synthetase inhibition by alkaloids of *Heimia salicifolia* 161
W.J. Lema, J.W. Blankenship and M.H. Malone (Stockton, CA)

Contribution to the ethnopharmacological study of the Canary Islands 169
V. Darias, L. Bravo, E. Barquin, D. Martin Herrera and C. Fraile (Tenerife, Spain)

Sources of the anti-implantation alkaloid yuehchukene in the genus *Murraya* 195
Y.-C. Kong, K.-H. Ng, P. P.-H. But, Q. Li, S.-X. Yu, H.-T. Zhang, K.-F. Cheng, D.D. Soejarto, W.-S. Kan and P.G. Waterman (Guangzhou, China; Shatin, Hong Kong; Chicago, IL; Taichung, Taiwan; Glasgow, Scotland)

Potential antimalarial candidates from African plants: an in vitro approach using *Plasmodium falciparum* 201
S.A. Khalid, A. Farouk, T.G. Geary and J.B. Jensen (Khartoum, The Democratic Republic of Sudan; East Lansing, MI)

SHORT COMMUNICATION

Laboratory observations on the molluscicidal properties of *Swartzia madagascariensis* (Leguminosae) 211
R.K. Sarda, S.C. Chhabra and J.N. Minjas (Dar es Salaam, Tanzania)

BOOK REVIEWS 215

REVIEW PAPER

Problems and possibilities in the use of traditional drugs 221
R.P. Labadie (Utrecht, The Netherlands)

RESEARCH PAPERS

Preliminary screening of Far-Eastern ethnomedicinal plants for antibacterial activity 231
S.A. Moskalenko (Vladivostok, U.S.S.R.)

Acute antihypertensive effect in conscious rats produced by some medicinal plants used in the state of São Paulo 261
R. De A. Ribeiro, M. Margarida R Fiuza de Melo, F. De Barros, C. Gomes and G. Trolin (São Paulo, Brazil)

Evaluation of mastic, a crude drug obtained from *Pistacia lentiscus* for gastric and duodenal anti-ulcer activity 271
M.S. Al-Said, A.M. Ageel, N.S. Parmar and M. Tariq (Riyadh, Saudi Arabia)

Comparative in vitro antimicrobial activity of Chinese medicinal herbs 279
S.G. Franzblau and C. Cross (Tuscon, AZ and San Francisco, CA)

Effect of Chinese herbal medicine "Kanbaku-taiso-to" on neuropharmacological tests 289
T. Tsuda, K. Kubota, K. Yasuda, A. Sugaya and E. Sugaya (Saitama and Yokosuka, Japan)

Enigma of drug-induced altered states of consciousness among the !Kung Bushmen of the Kalahari Desert 297
M. Dobkin de Rios (Fullerton, CA)

Screening of cytotoxic activities of *Strychnos* alkaloids (methods and results) 305
J. Leclercq, M.-C. de Pauw-Gillet, R. Bassleer and L. Angenot (Liege, Belgium)

BOOK REVIEW 317

ANNOUNCEMENTS 319

Subject Index — Volume 15 321
Author Index — Volume 15 323
Contents — Volume 15 325

Volume 16 (1986)

RESEARCH PAPERS
Screening of medicinal plants of Rwanda (Central Africa) for antimicrobial activity. 1
Y. Boily and L. van Puyvelde (Butare, Rwanda)
A double-blind, placebo-controlled clinical study on the effect of a standardized ginseng extract on psychomotor performance in healthy volunteers 15
L. D'Angelo, R. Grimaldi, M. Caravaggi, M. Marcoli, E. Perucca, S. Lecchini, G.M. Frigo and A. Crema (Pavia, Italy)
Etude ethnobotanique des Euphorbiacées d'Afrique de l'Ouest 23
N. Stäuble (Geneva, Switzerland)
Hepatoprotective properties of *Crepis rueppellii* and *Anisotes trisulcus:* two traditional medicinal plants of Yemen 105
J. Fleurentin, C. Hoefler, A. Lexa, F. Mortier and J.M. Pelt (Metz and Nancy, France)

ANNOUNCEMENTS 113

EDITORIAL: Introducing the Reference Section 115

REVIEW PAPER
The *Aloe vera* phenomenon: a review of the properties and modern uses of the leaf parenchyma gel 117
D. Grindlay and T. Reynolds (Richmond, U.K.)

RESEARCH PAPERS
Effect of *Erythroxylum coca,* cocaine and ecgonine methyl ester as dietary supplements on energy metabolism in the rat 153
F.J. Burczynski, R.L. Boni, J. Erickson and T.G. Vitti (Winnipeg, Canada)
Plants used in phytotherapy, cosmetics and dyeing in the Pramanda district (Epirus, North-West Greece. 167
F. Tammaro and G. Xepapadakis (L'Aquila, Italy and Pramanda, Greece)
Ethnomedical and ethnobotanical investigations among some scheduled caste communities of Travancore, Kerala, India 175
P. Pushpangadan and C.K. Atal (Jammu Tawi, India)
Effect of ginsenosides Rg_1, Rc and Rb_2 on hormone-induced lipolysis and lipogenesis in rat epididymal fat cells 191
T.B. Ng, C.M. Wong and H.W. Yeung (Shatin, Hong Kong)
Unani Joshandah drugs for common cold, catarrh, cough and associated fevers 201
S.B. Vohora (New Delhi, India)
A multidisciplinary approach to ritual enema scenes on ancient Maya pottery. 213
P.A.G.M. de Smet and N.M. Hellmuth (The Hague, The Netherlands and Culver City, CA)

Pharmacological evaluation of the folklore use of *Sphenostylis stenocarpa* 263
I.U. Asuzu (Nsukka, Nigeria)
Hypotensive effect of *Rhamnus lycioides* extracts 269
A. Villar, M.C. Terencio and M. Paya (Valencia, Spain)
A preliminary classification of the healing potential of medicinal plants, based on a rational analysis of an ethnopharmacological field survey among Bedouins in the Negev desert, Israel 275
J. Friedman, Z. Yaniv, A. Dafni and D. Palewitch (Tel Aviv and Haifa, Israel)

REFERENCE SECTION. 289

BOOK REVIEWS 323

SUBJECT INDEX — Volume 16. 327
AUTHOR INDEX — Volume 16. 329
CONTENTS — Volume 16 331

Volume 17 (1986)

RESEARCH PAPERS
La médecine populaire dans le plateau central d'Haiti. 1 Etude du système therapeutique traditionnel dans un cadre socio-culturel rural 1
B. Weniger, M. Rouzier, R. Daguilh, J. Foucaud, L. Robineau et R. Anton (Strasbourg, France and Santo-Domingo, Rep. Dominicaine)
La médecine populaire dans la plateau central d'Haiti, 2 Inventaire ethnopharmacologique. 13
B. Weniger, M. Rouzier, R. Daguilh, D. Henrys, J.H. Henrys et R. Anton (Strasbourg, France and Port-au-Prince, Haiti)
The direct negative inotropic effect of gossypol 31
W.-M. Huang and F. Urthaler (Birmingham, AL)
Pharmacology of lemongrass (*Cymbopogon citratus* Stapf). I.
Effects of teas prepared from the leaves on laboratory animals 37
E.A. Carlini, J. de D.P. Contar, A.R. Silva-Filho, N.G. da Silveira-Filho, M.L. Frochtengarten and O.F.A. Bueno (São Paulo, Brazil)
Pharmacology of lemongrass (*Cymbopogon citratus* Stapf). II
Effects of daily two month administration in male and female rats in offspring exposed "in utero" 65
M.L.O. Souza Formigoni, H.M. Lodder, O.G. Filho, T.M.S. Ferreira and E.A. Carlini (São Paulo, Brazil)
Pharmacology of lemongrass (*Cymbopogon citratus* Stapf). III
Assessment of eventual toxic, hypnotic and anxiolytic effects on humans 75
J.R. Leite, M. de Lourdes V. Seabra, E. Maluf, K. Assolant, D. Suchecki, S. Tufik, H.M. Calil and E.A. Carlini (São Paulo, Brazil)
Screening *Azadirachta indica* and *Pisum sativum* for possible antimalarial activities 85
M.O. Abatan and M.J. Makinde (Ibadan, Nigeria)

SHORT COMMUNICATION
Effect of Neem seed oil on the blood glucose concentration of normal and alloxan diabetic rats 95
V.P. Dixit, R. Sinha and R. Tank (Jaipur, India)

BOOK REVIEWS 99

RESEARCH PAPERS

Preclinical and clinical studies with latex from *Ficus glabrata* HBK, a traditional intestinal anthelminthic in the Amazonian area 105
A. Hansson, G. Veliz, C. Naquira, M. Amren, M. Arroyo and G. Arevalo (Lima and Pucallpa, Peru)

Skeletal muscle relaxant properties of the aqueous extract of *Portulaca oleracea* 139
F. Okwuasaba, C. Ejike and O. Parry (Jos, Nigeria)

Influence of *Epilobium* extracts on prostaglandin biosynthesis and carrageenin induced oedema of the rat paw 161
A. Hiermann, H. Juan and W. Sametz (Graz, Austria)

An Indian herbal formula (SKV) for controlling voluntary ethanol intake in rats with chronic alcoholism 171
E.R.B. Shanmugasundaram and K.R. Shanmugasundaram (Madras, India)

Traditional medicine of Baja California Sur (Mexico) I. 183
R.E. Dimayuga and J. Agundez (La Paz, Mexico)

SHORT COMMUNICATION

Retrorsin from a Paraguayan herbal tea 195
G.S. Hirschmann and C. Céspedes (Asunción, Paraguay)

BOOK REVIEW 197

CONFERENCE NEWS 199

RESEARCH PAPERS

The Museum of Materia Medica of Paris 201
P. Delaveau, R.R. Paris and G. Clair (Paris, France)

Investigation of *Grewia bicolor* Juss. 205
M.W.J.M. Jaspers, A.K. Bashir, J.H. Zwaving and Th. M. Malingré (Groningen, The Netherlands and Khartoum, Sudan)

Effects of crude drugs on experimental hypercholesterolemia I. Tea and its active principles 213
H. Matsuda, T. Chisaka, Y. Kubomura, J. Yamahara, T. Sawada, H. Fujimura and H. Kimura (Kyoto and Gifu, Japan)

Studies on brain structure and neurological function in alcoholic rats controlled by Indian medicinal formula (SKV) 225
E.R.B. Shanmugasundaram, K.R. Shanmugasundaram, U. Subramaniam and R. Santhini (Madras, India)

Extra-pancreatic effects of *Momordica charantia* in rats 247
J. Welihinda and E.H. Karunanayake (Colombo, Sri Lanka)

Effects of Chinese herbal medicine "Kanbaku-taiso-to" on transmembrane ionic currents and its local anesthetic action 257
T. Tsuda,K. Kubota, K. Yasuda, S. Nishikawa, A. Sugaya and E. Sugaya (Saitama and Yokosuka, Japan)

Effects of *Salvadora persica* extracts on mice exploratory locomotion activities 263
M.I. Sulaiman, M.A. Ajabnoor and T. Al khateeb (Jeddah, Saudi Arabia)

Active principles of *Tetradenia riparia*. I. Antimicrobial activity of 8(14),15-sandaracopimaradiene-7α,18-diol 269
L. van Puyvelde, S. Nyirankuliza, R. Panebianco, Y. Bioly, I. Geizer, B. Sebikali, N. de Kimpe and N. Schamp (Butare, Rwanda and Gent, Belgium)

Effect of *Momordica charantia* on the glucose tolerance in maturity onset diabetes 277

J. Welihinda, E.H. Karunanayake, M.H.R. Sheriff and K.S.A. Jayasinghe (Colombo, Sri Lanka)
Screening of some Somalian medicinal plants for antimicrobial activity 283
B. Svendsen, J.J.C. Scheffer and R. Verpoorte (Mogadishu, Somalia and Leiden, The Netherlands)
Mucilage in seeds of *Plantago ovata* and its wild allies 289
P.K. Sharma and A.K. Koul (Jammu, India)

ABSTRACT SECTION 297

SUBJECT INDEX — Volume 17 307
AUTHOR INDEX — Volume 17 309
CONTENTS — Volume 17 311

Volume 18 (1986)

EDITORIAL
Creation of the International Society for Ethnopharmacology (I.S.E.P) 1

RESEARCH PAPERS
Smooth muscle contracting lipid-soluble principles in chromatographic fractions of *Ocimum gratissimum* 3
F.D. Onajobi (Ile Ife, Nigeria)
Dose-response effects of *Desmodium adscendens* aqueous extract on histamine response, content and anaphylactic reactions in the guinea pig 13
M.E. Addy and W.K. Dzandu (Legon, Ghana)
Effect of *Cuscuta chinensis* water extract on 7,12-dimethylbenz[*a*]anthracene-induced skin papillomas and carcinomas in mice 21
M. Nisa, S. Akbar, M. Tariq and Z. Hussain (Aligarh, India)
Anti-ulcerogenic effect of banana powder *(Musa sapientum* var. *paradisiaca)* and its effect on mucosal resistance 33
R.K. Goel, S. Gupta, R. Shankar and A.K. Sanyal (Varanasi, India)
Effects of α-momorcharin, β-momorcharin and α-trichosanthin on lipogenesis and testicular and adrenal steroidogenesis in vitro and plasma-glucose levels in vivo 45
T.B. Ng, W.K. Hon, L.H. Lo, W.W. Li and H.W. Yeung (Shatin, Hong Kong)
A steryl glycoside fraction with hemolytic activity from tubers of *Momordica cochinchinensis* 55
T.B. Ng, W.W. Li and H.W. Yeung (Shatin, Hong Kong)
Effects of *Olax gambecola* methanol extract on smooth muscle and rat blood pressure 63
O. Parry, F.K. Okwuasaba, K.I. Ekpenyong and C.M. Ashraf (Jos, Nigeria)
Zoapatle XII. In vitro effect of kaurenoic acid isolated from *Montanoa frutescens* and two derivatives upon human spermatozoa 89
A. Valencia, A. Wens, H. Ponce-Monter, N. Pedrón, A.J. Gallegos, L. Quijano, J. Calderón, F. Gómez and T. Ríos (Mexico)
Estrogenic and postcoital anticonceptive activity in rats of butin isolated from *Butea monosperma* seed 95
S.K. Bhargava (Jaipur, India)

RESEARCH PAPERS
Anticonvulsant activity of the volatile oil from the fruit of *Tetrapleura tetraptera*. 103
J.I. Nwaiwu and P.A. Akah (Nsukka, Nigeria)

Frequently used medicinal plants in Baja California Norte 109
M. Winkelman (Irvine, CA)
Immunomodulating agents of plant origin. I. Preliminary screening 133
C.K. Atal, M.L. Sharma, A. Kaul and A. Khajuria (Jammu-Tawi, India)
Effect of feeding *Gymnema sylvestre* leaves on blood glucose in beryllium nitrate treated rats 143
A.O. Prakash, S. Mathur and R. Mathur (Gwalior, India)
A survey of prescriptions used in traditional medicine in Gondar region, northwestern Ethiopia: general pharmaceutical practice 147
W. Abebe (Gondar, Ethiopia)
Schumanniofoside, the antisnake venom principle from the stem bark of *Schumanniophyton magnificum* Harms 167
D.N. Akunyili and P.I. Akubue (Nsukka, Nigeria)
Preliminary phytochemical, pharmacological and antibacterial studies of the alkaloidal extracts of the leaves of *Synclisia scabrida* Miers 183
E. Sokomba, C. Wambebe, B.K. Chowdhury, J. Iriah, O.N. Ogbeide and D. Orkor (Zaria and Benin City, Nigeria)
In vivo activity of an extract of *Pavetta owariensis* bark on experimental *Schistosoma mansoni* infection in mice 187
A.M. Baldé, E. Van Marck and M. Vanhaelen (Brussels and Antwerp, Belgium)
Effects of five kampohozais on the mitogenic activity of lipopolysaccharide, concanavalin A, phorbol myristate acetate and phytohemagglutinin in vivo 193
H. Iwama, S. Amagaya and Y. Ogihara

BOOK REVIEWS 205
NEWS 209

REVIEW PAPER
Ethnobotanical review of medicinal plants from Thai traditional books, Part I: plants with anti-inflammatory, anti-asthmatic and antihypertensive properties 213
A. Panthong, D. Kanjanapothi and W.C. Taylor (Chiang Mai, Thailand and Sydney, Australia)

RESEARCH PAPERS
Psychopharmacologic analysis of an alleged oneirogenic part: *Calea zacatechichi* 229
L. Mayagoitia, J.-L. Díaz and C.M. Contreras (Tlalpan and Coyoacan, Mexico)
Effects of an extract of khat (*Catha edulis*) on the toad heart 245
Z. Nabil, M. Saleh, H. Makkawy and G. Abd Allah (Cairo, Egypt)
Nigerian folk medicine: practices and beliefs of the Ondo people 257
L.S. Gill and C. Akinwumi (Benin City, Nigeria)
Studies on mate drinking 267
A. Vázquez and P. Moyna (Montevideo, Uruguay)
Toxicity of plant material used as emergency food during famines in Finland . 273
M.M. Airaksinen, P. Peura, L. Ala-Fossi-Salokangas, S. Antere, J. Lukkarinen, M. Saikkonen and F. Stenbäck (Kuopio and Helsinki, Finland)

ABSTRACT SECTION 297

SUBJECT INDEX — Volume 18 301
AUTHOR INDEX — Volume 18 303
CONTENTS — Volume 18 305

Volume 19 (1987)

REVIEW PAPERS

Nigerian flora and its pharmaceutical potential 1
Z.O. Gbile and S.K. Adesina (Ibadan and Ile-Ife, Nigeria)

Depigmenting procedures and drugs employed by melanoderm populations . . 17
A. Scarpa and A. Guerci (Rapallo, Italy)

RESEARCH PAPERS

Medicinal plants in Mozambique and their popular use 67
R. Verzár and G. Petri (Budapest, Hungary)

Local anti-inflammatory activity of *Tamus communis* 81
N. Mascolo, G. Autore and F. Capasso (Naples, Italy)

Ethno-medical uses of plants growing in the Bulandshahr district of Northern India 85
M. Mashkoor Alam and M. Anis (Aligarh, India)

Plant-derived alkaloids active against *Trypanosoma cruzi* 89
J.C. Cavin, S.M. Krassner and E. Rodriguez (Irvine, CA)

Anti-ulcer action of *Panax japonicus* rhizome 95
J. Yamahara, Y. Kubomura, K. Miki and H. Fujimura (Kyoto, Japan)

Antihepatotoxic actions of formosan plant drugs 103
L.-L. Yang, K.-Y. Yen, Y. Kiso and H. Hikino (Taiwan, Republic of China and Sendai, Japan)

BOOK REVIEWS 111

NEWS 115

Obituary 117

RESEARCH PAPERS

Development of Chinese medicine based on pharmacology and therapeutics . 119
L. Chang-Xiao (Tainjin, People's Republic of China)

Immunodulatory activity of an aqueous extract of *Azadirachta indica* stem bark 125
J.M. van der Nat, J.P.A.M. Klerx, H. van Dijk, K.T.D. de Silva and R.P. Labadie (Utrecht, The Netherlands and Nugegoda, Sri Lanka)

Comparative choleretic and hepatoprotective properties of young sprouts and total plant extracts of *Rosmarinus officinalis* in rats 133
C. Hoefler, J. Fleurentin, F. Mortier, J.M. Pelt and J. Guillemain (Metz, Nancy and Paris, France)

Plants used for the treatment of diabetes in Israel 145
Z. Yaniv, A. Dafni, J. Friedman and D. Palevitch (Bet Dagan and Ramat Aviv, Israel)

A study of four medicinal plant complexes of Mexico and adjacent United States 153
E. Linares and R.A. Bye, Jr. (México DF, México)

Antipyretic studies on some indigenous Pakistani medicinal plants: II 185
M. Ikram, S.G. Khattak and S.N. Gilani (Peshawar, Pakistan)

Analgesic, antipyretic and ulcerogenic activity of *Nyctanthes arbor tristis* leaf extract 193
R.S. Saxena, B. Gupta, K.K. Saxena, V.K. Srivastava and D.N. Prasad (Meerut, India)

Biochemical modes of action of *Cassia occidentalis* and *Cardiospermum halicacabum* in inflammation 201
J. Sadique, T. Chandra, V. Thenmozhi and V. Elango (Thanjavur, India)

Croton macrostachys, a plant used in traditional medicine: purgative and inflammatory activity 213
G. Mazzanti, P. Bolle, L. Martinoli, D. Piccinelli, I. Grgurina, F. Animati and Y. Mugne (Rome, Italy and Mogadiscio, Somalia)

SHORT COMMUNICATION
Effect of an aqueous infusion of *Guatteria gaumeri* bark upon gallbladder calculi in the golden hamster 221
E. Tena-Betancourt, A. Guzmán, F. Ayala-Logos, M.A. Chavez-Soto and P. Hernández-Jáuregui (Mexico City and Morelos, Mexico)

LETTER TO THE EDITORS 227
NEWS 229
CORRIGENDUM/ERRATUM 231

RESEARCH PAPERS
Diuretic activity of plants used for the treatment of urinary ailments in Guatemala 233
A. Cáceres, L.M. Girón and A.M. Martínez (Guatemala, Central America)
Skeletal muscle relaxant action of an aqueous extract of *Portulaca oleracea* in the rat 247
O. Parry, F.W. Okwuasaba and C. Ejike (Jos, Nigeria)
Anti-inflammatory studies on *Polygonum glabrum* 255
B. Singh, V.B. Pandey, V.K. Joshi and S.S. Gambhir (Varanasi, India)
The content of psychoactive phenylpropyl and phenylpentyl khatamines in *Catha edulis* Forsk. of different origin 269
S. Geisshüsler and R. Brenneisen (Berne, Switzerland)
Anti-*Bacteroides fragilis* substance from rhubarb 279
J.-C. Cyong, T. Matsumoto, K. Arakawa, H. Kiyohara, H. Yamada and Y. Otsuka (Tokyo, Japan)
The medicinal plants of Gunung Leuser National Park, Indonesia 285
S. Elliott and J. Brimacombe (Edinburgh, UK)
Chemistry and pharmacology of a tertiary alkaloid from *Strychnos trinervis* root bark 319
M. de F.F. Melo, C.A. de M. Santos, A. de A. Chiappeta, J.F. de Mello and R. Mukherjee (João Pessoa and Recife, Brazil)

LETTER TO THE EDITORS 327
BOOK REVIEWS 333
ABSTRACT SECTION 335
SUBJECT INDEX — Volume 19. 343
AUTHOR INDEX — Volume 19. 345
CONTENTS — Volume 19 347

Volume 20 (1987)

GOSSYPOL SPECIAL ISSUE
Analysis of gossypol by high performance liquid chromatography. 1
M.-Z. Wang (Beijing, China)
Resolution of racemic gossypol 13
L. Huang, D.-K. Zheng and Y.-K. Si (Beijing, China)
Effect of (−)- and (+)-gossypol on fertility in male rats 21
N.-G. Wang, L.-F. Zhou, M.-H. Guan and H.-P. Lei (Beijing, China)
Effect of (±)-, (+)- and (−)-gossypol on the lactate dehydrogenase-X activity of rat testis. 25
K.-Q. Yao, Q.-M. Gu and H.-P. Lei (Beijing, China)

Comparative study on the metabolism of optical gossypol in rats 31
Q.-Q. Chen, H. Chen and H.-P. Lei (Beijing, China)
Effect of gossypol acetic acid on the epididymis: histochemical and scanning electron microscope studies. 39
L.-F. Zhou, S.-Q. Qi and H.-P. Lei (Beijing, China)
Effects of gossypol acetic acid on rat luteal cells in vitro 45
N.-G. Wang, M.-Z. Guan and H.-P. Lei (Beijing, China)
Hepatotoxicity of gossypol in rats 53
Y. Wang and H.-P. Lei (Beijing, China)
Probing into the mechanism of action, metabolism and toxicity of gossypol by studying its (+)- and (−)-stereoisomers 65
Y.-W. Yu (Beijing, China)

BOOK REVIEW 79

RESEARCH PAPERS
Ichthyotoxic activities of *Ateleia glazioviana* Baill. and *Thinouia coriacea* Britt. 81
G. González Ortega and E.P. Schenkel (Porto Alegre, Brazil)
Comparison of the skeletal muscle relaxant properties of *Portulaca oleracea* extracts with dantrolene sodium and methoxyverapamil 85
F. Okwuasaba, C. Ejike and O. Parry (Jos, Nigeria)
Vasodilator effects of cepharanthine, a biscoclaurine alkaloid, on cutaneous microcirculation in the rabbit 107
M. Asano, C. Ohkubo, A. Sasaki, K. Sawanobori and H. Nagano (Tokyo, Japan)
Natural constituents of *Ilex* species 121
F. Alikaridis (London, U.K.)
Ethnobotanical inventory of medicinal plants used by the Guaymi Indians in Western Panama. Part I 145
L.G. Joly, S. Guerra, R. Séptimo, P.N. Solís, M. Correa, M. Gupta, S. Levy and F. Sandberg (Panama and Uppsala, Sweden)
On the ethnomedical significance of the Arjun tree, *Terminalia* arjuna (Roxb.) Wight & Arnot 173
D.S. Kumar and Y.S. Prabhakar (Coimbatore, India)

REVIEW PAPER
An integrated approach to the pharmacological evaluation of traditional materia medica 191
G.A. Kyerematen and E.O. Ogunlana (Uppsala, Sweden)

RESEARCH PAPERS
Traditional medicine of Baja California Sur (Mexico) II 209
R. Encarnación Dimayuga, R. Fort Murillo and M. Luis Pantoja (La Paz, Mexico)
Screening of antimicrobial activity of plants popularly used in Guatemala for the treatment of dermatomucosal diseases 223
A. Cáceras, L.M. Girón, S.R. Alvarado and M.F. Torres (Guatemala, Central America)
Antihepatotoxic actions of *Cochlospermum tinctorium* rhizomes 239
B. Diallo, M. Vanhaelen, Y. Kiso and H. Hikino (Bruxelles, Belgium and Sendai, Japan)

Repertory of drugs and medicinal plants used in traditional medicine of Afghanistan 245
C. Younos, J. Fleurentin, D. Notter, G. Mazars, F. Mortier and J.-M. Pelt (Metz, Nancy and Strasbourg, France)

ABSTRACT SECTION 291
SUBJECT INDEX – Volume 20 303
AUTHOR INDEX – Volume 20 305
CONTENTS – Volume 20 307

Volume 21 (1987)

RESEARCH LETTERS

Piscicidal plants of Nepal: preliminary toxicity screening using grass carp (*Ctenopharyngodon idella*) fingerlings 1
A.T. Kulakkattolickal (Chitwan, Nepal)

Effect of banana powder (*Musa sapientum* var. *paradisiaca*) on gastric mucosal shedding 11
K. Mukhopadhyaya, D. Bhattacharya, A. Chakraborty, R.K. Goel and A.K. Sanyal (Varanasi, India)

Effects of ginsenosides, lectins and *Momordica charantia* insulin-like peptide on corticosterone production by isolated rat adrenal cells 21
T.B. Ng, W.W. Li and H.W. Yeung (Shatin, Hong Kong)

Abortifacient activity in leaves, roots and seeds of *Phytolacca acinosa* 31
H.W. Yeung, Z. Feng, W.W. Li, W.K. Cheung and T.B. Ng (Shatin, Hong Kong)

Biopharmaceutical studies on crude drug preparations. I. Permeation of paeonol in a decoction and dry extract of *Paeonia suffruticosa* root cortex using an absorption simulator 37
T. Tani, K. Inoue, S. Arichi and T. Ohno (Osaka, Japan)

Effect of Shosaikoto, a Japanese and Chinese traditional herbal medicinal mixture, on the mitogenic activity of lipopolysaccharide: a new pharmacological testing method 45
H. Iwama, S. Amagaya and Y. Ogihara (Nagoya, Japan)

Effects of extracts of *Portulaca oleracea* on skeletal muscle in vitro 55
F. Okwuasaba, C. Ejike and O. Parry (Jos, Nigeria)

Effect of Brahmi Rasayan on the central nervous system 65
B. Shukia, N.K. Khanna and J.L Godhwani (Rajasthan, India)

Structure and chemotherapeutical activity of a polyisoprenylated benzophenone from the stem bark of *Garcinia huillensis* 75
P. Bakana, M. Claeys, J. Totté, L.A.C. Pieters, L. Van Hoof, T. Vemba, D.A. Van Den Berghe and A.J. Vlietinck (Antwerp, Belgium)

Use of khat in lactating women: a pilot study on breast-milk secretion 85
B. Kristiansson, N.A. Ghani, M. Eriksson, M. Garle and A. Qirbi (Gothenburg and Stockholm, Sweden; Sana'a, Yemen Arab Republic)

SHORT COMMUNICATIONS

Investigation into the mechanism of action of extracts of *Portulaca oleracea* 91
F. Okwuasaba, O. Parry and C. Ekike (Jos, Nigeria)

Preliminary clinical investigation into the muscle relaxant actions of an aqueous extract of *Portulaca oleracea* applied topically 99
O. Parry, F. Okwuasaba and C. Ejike (Jos, Nigeria)

NEWS 107

RESEARCH PAPERS

Les phytothérapies anti-infectieuses de la fôret-savane Sénégal (Afrique occidentale) I. Un inventaire 109
A. le Grand and P.A. Wondergem (Amsterdam, The Netherlands)

Evaluation of the antihepatotoxic activity of the biflavonoids of *Garcinia kola* seed... 127
M.M. Iwu, O.A. Igboko, U.A. Onwuchekwa and C.O. Okunji (Nsukka, Nigeria)

Antimicrobial activity of selected plants employed in the Spanish Mediterranean area 139
J.L. Ríos, M.C. Recio and A. Villar (Valencia and Madrid, Spain)

Ocimum sanctum: an experimental study evaluating its anti-inflammatory, analgesic and antipyretic activity in animals 153
S. Godhwani, J.L. Godhwani and D.S. Vyas (Rajasthan, India)

Post-coital antifertility activity of the seeds of *Coriandrum sativum* in rats 165
M.S. Al-Said, K.I. AL-Khamis, M.W. Islam, N.S. Parmer, M. Tariq and A.M. Ageel (Riyadh, Saudi Arabia)

Effect of different fractions of *Swertia chirayita* on the blood sugar level of albino rats 175
B. Chandra Sekar, B. Mukherjee, R.B. Chakravarti and S.K. Mukherjee (Lucknow, India)

Preliminary pharmacological studies on *Eugenia Uniflora* leaves: xanthine oxidase inhibitory activity 183
G. Schmeda-Hirschmann, C. Theoduloz, L. Franco, E. Ferro B. and A.R. de Aris (Asunción, Paraguay)

SHORT COMMUNICATIONS

A magic use of *Crotalaria incana* pods 187
G. Schmeda-Hirschmann, L. Franco and E. Ferro B. (Asunción, Paraguay)

Corynocarpus similis Hemsley, plante alimentaire et toxique de Vanuatu (ex. Nouvelles-Hebrides) 189
P. Cabalion and J. Poisson (Châtenay-Malabry, France)

Normalizing effect of Saiko-keishi-to commercial formula on cytochalasin-B distorted neurites using primary cultured neurons of rat cerebral cortex 193
A. Sugaya, M. Yuzurihara, T. Tsuda, K. Yasuda, E. Sugaya, K. Kajiwara, T. Takagi and J. Komatsubara (Yokosuka, Japan)

Pharmacological screening of *pulsatilla alpina* subsp. apiifolia 201
M.L. Martin, A. Moran and L. San Roman (Salamanca, Spain)

LETTER TO THE EDITORS 207

REVIEW PAPER

Modification of arachidonic metabolism by flavonoids 209
M.J. Alcaraz and M.L. Ferrándiz (Valencia, Spain)

RESEARCH PAPERS

Slavic ethnomedicine in the Soviet Far East. Part I: Herbal remedies among Russian/Ukrainians in the Sukhodol Valley, Primorye 231
S.A. Moskalenko (Vladivostok, USSR)

Plants used in traditional medicine in Eastern Tanzania. I. Pteridophytes and angiosperms (Acanthaceae to Canellaceae) 253
S.C. Chhabra, R.L.A. Mahunnah and E.N. Mshiu (Dar es Salaam, Tanzania)

Medicine and magic among the Maka Indians of the Paraguayan Chaco 279
P. Arenas (Buenos Aires, Argentina)

Toxicologic and histopathologic studies of *Pleurotus ostreatus* mushroom in mice 297
I.H.S. Al-Deen, H.A.A. Twaij, A.A. Al-Badr and T.A.W. Istarabadi (Baghdad, Iraq)

SHORT COMMUNICATIONS

Effect of *Celastrus paniculatus* seed extract on the brain of albino rats 307
P.P. Bidwai, D. Wangoo and N.K. Bhullar (Chandigarh, India)

Medicinal plants of Surinam IV. Antimicrobial activity of some medicinal plants 315
R. Verpoorte and P.P. Dihal (Leiden, Netherlands)

SUBJECT INDEX – Volume 21 319

AUTHOR INDEX – Volume 21 321

CONTENTS – Volume 21 323

Volume 22 (1988)

RESEARCH PAPERS

Pharmacological aspects of selected herbs employed in hispanic folk medicine in the San Luis Valley of Colorado, USA: II *Asclepias asperula* (inmortal) and *Achillea lanulosa* (plumajillo) 1
B.D. Kelley, G.D. Appelt and J.M. Appelt (Boulder, CO)

A review of medicinal plants showing anticonvulsant activity 11
A.K. Chauhan, M.P. Dobhal and B.C. Joshi (Jaipur, India)

Anti-infectious phytotherapies of the tree-savannah of Senegal (West Africa) II. Antimicrobial activity of 33 species 25
A. le Grand, P.A. Wondergem, R. Verpoorte and J.L. Pousset (Leyden, The Netherlands and Faan, Senegal)

Effect of an aqueous extract of *Portulaca oleracea* leaves on smooth muscle and rat blood pressure 33
O. Parry, F. Okwuasaba and C. Ejike (Jos, Nigeria)

Effect of *Trigonella foenum graceum* on blood glucose levels in normal and alloxan-diabetic mice 45
M.A. Ajabnoor and A.K. Tilmisany (Jeddah, Saudi Arabia)

Antifertility profile of the aqueous extract of *Moringa oleifera* roots 51
S. Shukla, R. Mathur and A.O. Prakash (Gwalior, India)

Pharmacologic studies on the active principles of *Calliandra portoticensis* leaf extracts 63
C.N. Aguwa and A.M. Lawal (Nsukka, Nigeria)

Ethnobotanical observations on Paraguayan Myrtaceae. I. 73
G.S. Hirschmann (Asunción, Paraguay)

Effect of *Cassia alata* leaf extract on hyperglycemic rats 81
S. Palanichamy, S. Nagarajan and M. Devasagayam (Tiruchirapalli, India)

Inhibitory effects of fungi on aggregation of rabbit platelets and rat polymorphonuclear leucocytes in vitro 91
A. Pinto, G. Cirino, R. Meli, F. Senatore and F. Capasso (Naples, Italy)

Anti-inflammatory activity of oleoresin from Brazilian *Copaifera* 101
A.C. Basile, J.A.A. Sertié, P.C.D. Freitas and A.C. Zanini (São Paulo, Brazil)

SHORT COMMUNICATIONS

Effect of *Teucrium polium* boiled leaf extract on intestinal motility and blood pressure 111
M.-S. Suleiman, A.-S. Abdul-Ghani, S. Al-Khalil and R. Amin (West Bank, Israel)

Erythroxylum argentinum: assays for anti-inflammatory activity 117
C.G. Chaves, E.E.S. Schapoval, J.A. Zuanazzi, E. Diehl, N.C.S. de Siqueira and A.T. Henriques (Porto Alegre, Brazil)

REVIEW PAPER

The biological activity of valerian and related plants 121
P.J. Houghton (London, UK)

RESEARCH PAPERS

Studies on the pharmacological activity of Amazonian Euphorbiaceae 143
W.D. MacRae, J.B. Hudson and G.H.N. Towers (Vancouver, Canada)

Proliferative effect of ginseng saponin on neurite extension of primary cultured neurons of the rat cerebral cortex 173
A. Sugaya, M. Yuzurihara, T. Tsuda, K. Yasuda, K. Kajiwara and E. Sugaya (Yokosuka, Japan)

Plants as sources of antimalarial drugs, Part 6: Activities of *Simarouba amara* fruits 183
M. J. O'Neill, D.H. Bray, P. Boardman, C.W. Wright, J.D. Phillipson, D.C. Warhurst, M.P. Gupta, M. Correya and P. Solis (London, U.K. and Estafeta, Republic of Panama)

Bromelain, the enzyme complex of pineapple (*Ananas comosus*)and its clinical application. An update 191
S.J. Taussig and S. Batkin (Honolulu, Hawaii)

Anticonvulsant activity of root and stem extracts of *Calliandra portoricensis* 205
P.A. Akah and J.I. Nwaiwu (Nsukka, Nigeria)

Ethnopharmacology of *Calotropis procera* flowers 211
N. Mascolo, R. Sharma, S.C. Jain and F. Capasso (Naples, Italy and Jaipur, India)

SHORT COMMUNICATION

α-(−)-Peltatin, an antiviral constituent of *Amanoa* aff. *oblongifolia* 223
W.D. MacRae, J.B. Hudson and G.H.N. Towers (Vancouver, Canada)

BOOK REVIEWS 227

LIST OF REFEREES – 1987 229

RESEARCH PAPERS

Herbal remedies in the traditional medicine of the Venezia Giulia region (north east Italy) 231
L.C. Lokar and L. Poldini (Trieste, Italy)

Pharmacological investigations on *Achyrocline satureioides* (Lam.) DC., Compositae 281
C.M.O. Simões, E.P. Schenkel, L. Bauer and A. Langeloh (Porto Alegre, Brazil)

Traditional phytotherapy in the Roccamonfina volcanic group, Campania, southern Italy 295
R. Antonone, F. De Simone, P. Morrica and E. Ramundo (Napoli, Italy)

Anticandidal activity of plants used for the treatment of vaginitis in Guatemala and clinical trial of a *Solanum nigrescens* preparation 307
L.M. Girón, G.A. Aguilar, A. Cáceres and G.L. Arroyo (Guatemala City, Guatemala)

ABSTRACT SECTION 315
SUBJECT INDEX – Volume 22 331
AUTHOR INDEX – Volume 22 333
CONTENTS – Volume 22 335

Volume 23 (1988)

EDITORIAL 1

RESEARCH PAPERS

Assessment of the adrenergic beta-blocking activity of *Inula racemosa* 3
Y.B. Tripathi, P. Tripathi and B.N. Upadhyay (Varanasi, India)

Effect of khat on maternal food intake, maternal weight gain and fetal growth in the late-pregnant guinea pig 11
T. Jansson, B. Kristiansson and A. Qirbi (Gothenburg, Sweden and Sana'a, Yemen Arabic Republic)

Effect of khat on uteroplacental blood flow in awake chronically catheterized, late-pregnant guinea pigs 19
T. Jansson, B. Kristiansson and A. Qirbi (Gothenburg, Sweden and Sana'a, Yemen Arabic Republic)

Abortifacient properties of an extract from *Sida veronicaefolia* 27
G.D. Lutterodt (Kumasi, Ghana)

Acute toxicity study of the oil from *Azadirachta indica* seed (neem oil) 39
M. Ghandi, R. Lal, A. Sankaranarayanan, C.K. Banerjee and P.L. Sharma (Chandigarh, India)

Non-hormonal post-coital contraceptive action of neem oil in rats 53
A.O. Prakash, R.K. Tewari and R. Mathur (Gwalior, India)

Two functionally and chemically distinct immunomodulatory compounds in the gel of *Aloe vera* 61
L.A.'t Hart, P.H. van Enckevort, H. van Dijk, R. Zaat, K.T.D. de Silva and R.P. Labadie (Utrecht, The Netherlands and Nugegoda, Sri Lanka)

The ethnobotany of the Egyptian eastern desert: a comparison of common plant usage between two culturally distinct Bedouin groups 73
S.M. Goodman and J.J. Hobbs (Ann Arbor, MI and Austin, TX)

Effects of certain herbal medicines on the biotransformation of arachidonic acid: a new pharmacological testing method using serum 91
M. Umeda, S. Amagaya and Y. Ogihara (Nagoya, Japan)

SHORT COMMUNICATIONS

Effect of cajaminose from *Cajanus cajan* on gelation and oxygen affinity of sickle cell haemoglobin 99
M.M. Iwu, A.O. Igboko, H. Onwubiko and U.E. Ndu (Nsukka, Nigeria)

Action of curcuminoids on the hemolysis and lipid peroxidation of mouse erythrocytes induced by hydrogen peroxide 105
S. Toda, M. Ohnishi, M. Kimura and K. Nakashima (Osaka, Japan)

Evaluation of the anti-ulcer and antisecretory activity of extracts of *Aralia elata* root and *Schizandra chinensis* fruit in the rat 109
D.E. Hernandez, J.L. Hancke and G. Wikman (Chapel Hill, NC and Göteborg, Sweden)

LETTERS TO THE EDITORS

Ethnopharmacology of kratom and the *Mitragyna* alkaloids 115
K.L.R. Jansen and C.J. Prast (Auckland, New Zealand)

Tetrodotoxin and the zombi phenomenon 121
W.H. Anderson (Boston, MA)

REVIEW PAPER

Screening methods for natural products with antimicrobial activity: a review of the literature
J.L. Rios, M.C. Recio and A. Villar (Valencia and Madrid, Spain) 127

RESEARCH PAPERS

Effects of a Chinese herbal medicine, keishi-bukuryo-gan, on the gonadal system of rats
S. Sakamoto, H. Kudo, T. Kawasaki, K. Kuwa, N. Kasahara, S. Sassa and R. Okamoto (Tokyo, Japan) 151

Anticomplementary activity of the constituents of *Eucommia ulmoides* bark
Y. Oshima, S. Takata, H. Hikino, T. Deyama and G. Kinoshita (Sendai and Nagano, Japan) 159

Plantes et médecine traditionnelle dans le sud-est de Madagascar
P. Beaujard (Paris, France) 165

The extraction, isolation and identification of the purgative component of *Croton penduliflorus* seed oil
I.U. Asuzu, A.I. Gray and P.G. Waterman (Nsukka, Nigeria and Glasgow, Scotland) 267

Screening for cytotoxic activity of plants used in traditional medicine
J.-C. Chapuis, B. Sordat and K. Hostettmann (Lausanne and Epalinges, Switzerland) 273

Antipyretic activity of α- and β-santonin
M.L. Martín, A. Morán, R. Carrón, M.J. Montero and L.S. Román (Salamanca, Spain) 285

Acute effects of a khat extract on the rat electroencephalogram
M. Saleh, H. Mekkawy and F. El-Komy (Nasr City and Cairo, Egypt) 291

The anti-ulcer effect in rat of ginger constituents
J. Yamahara, M. Mochizuki, H.Q. Rong, H. Matsuda and H. Fujimura (Kyoto, Japan) 299

Evaluation of the efficacy of *Melothria maderaspatana* in the alleviation of carbon tetrachloride-induced liver dysfunction
M.I. Thabrew, K.A.P.W. Jayatilaka and D.J.B. Perera (Galle, Sri Lanka) 305

Responses of gastrointestinal smooth muscle preparations to a muscarinic principle present in *Sida veronicaefolia*
G.D. Lutterodt (Kumasi, Ghana) 313

SHORT COMMUNICATIONS

Pharmacologic screening and antimicrobial activity of the essential oil of *Calamintha sylvatica* subsp. *ascendens*
A.V. Ortiz de Urbina, M.L. Martín, M.J. Montero, R. Carrón and L. San Román (Salamanca, Spain) 323

Preliminary investigation of the estrogenic potential of grandiflorenic acid from *Montanoa tomentosa*
E. Bejar (Morelos, Mexico) 329

BOOK REVIEWS 333
ABSTRACTS SECTION 337
SUBJECT INDEX — Volume 23 365
AUTHOR INDEX — Volume 23 367
CONTENTS — Volume 23 369

Volume 24 (1988)

REVIEW PAPER

Traditional Chinese medicine and the search for new antineoplastic drugs 1
J. Han (Beijing, China)

RESEARCH PAPERS

Acute diuretic effects in conscious rats produced by some medicinal plants used in the state of São Paulo, Brasil 19
R. de A. Ribeiro, F. de Barros, M.M.R. Fiuza de Melo, C. Muniz, S. Chieia, M. das Graças Wanderley, C. Gomes and G. Trolin (São Paulo, Brasil)

Toxic Mexican folk remedies for the treatment of empacho: the case of azarcon, greta and albayalde 31
R.D. Baer and A. Ackerman (Tampa, FL and Tucson, AZ)

Ethnopharmacologic and phytochemical studies of the Thymelaeaceae 41
R.P. Borris, G. Blaskó and G.A. Cordell (Chicago, IL)

Hypoglycemia effects of *Teucrium polium* 93
M.N. Gharaibeh, H.H. Elayan and A.S. Salhab (Amman, Jordan)

Screening for antimalarial activity in the genus *Photomorphe* 101
C.Z. Amorim, C.A. Flores, B.E. Gomes, A.D. Marques and R.S.B. Cordeiro (Rio de Janeiro, Brasil)

Effect of prolonged administration of sublethal concentrations of aridanin isolated from *Tetrapleura tetraptera* and bayluscide on the glycogen and protein content of *Biomphalaria glabrata* 107
C.O. Adewunmi, W. Becker and G. Dörfler (Hamburg, F.R.G)

Antifertility effect in male rats of oleanolic acid, a triterpene from *Eugenia jambolana* flowers 115
M. Rajasekaran, J.S. Bapna, S. Lakshmanan, A.G. Ramachandran Nair, A.J. Veliath and M. Panchanadam (Pondicherry and Madras, India)

RESEARCH PAPERS

Hypoglycemic activity of *Artemisia herba alba* 123
H.A.A. Twaij and A.A. Al-Badr (Baghdad, Iraq)

The zoapatle XV. Activity of 16α-hydroxy-ent-kauran-19-oic acid isolated from *Montanoa hibiscifolia*, and its methyl ester on rat and guinea pig uterus 127
H. Ponce-Monter, G. Campos-Lara, N. Pedrón, L. De La Torre, T. Villanueva, A. Gallegos, A. Romo de Vivar, E. Azpeitia and A. Pérez (Mexico City, Mexico)

Immunomodulation by a unicellular green algae (*Chlorella pyrenoidosa*) in tumor-bearing mice 135
Y. Miyazawa, T. Murayama, N. Ooya, L.F. Wang, Y.C. Tung and N. Yamaguchi (Ishikawa, Japan and Taipei, China)

Chromatographic analysis of polyphenols of some Iberian *Thymus* 147
T. Adzet, R. Vila and S. Cañigueral (Barcelona, Spain)

Convulsive action of (25*S*)-isosolafloridine isolated from *Solanum pseudo-quina* bark 155
R.A.G. de Oliveira, J. Bhattacharyya, L.A.E. de Carvalho, R. Leonart, M. de Q. Paulo and G. Trolin (João Pessoa, Rio de Janeiro and Curitiba, Brazil)

Effects of sophoramine, an alkaloid from *Sophora alopecuroides* on isolated dog blood vessels 167
K. Bian and N. Toda (Ohtsu, Japan)

Xanthine oxidase inhibitory activity of Paraguayan Myrtaceae 179
C. Theoduloz, L. Franco, E. Ferro and G.S. Hirschmann (Asunción, Paraguay)

Pharmacologic effects of lactones isolated from *Pulsatilla alpina* subsp. *apiifolia* 185
M.L. Martin, A. V. Ortíz de Urbina, M.J. Montero, R. Carrón and L. San Román (Salamanca, Spain)

Ocimum sanctum — a preliminary study evaluating its immunoregulatory profile in albino rats 193
S. Godhwani, J.L. Godhwani and D.S. Vyas (Rajasthan, India)

A comparative trial of garlic, its extract and ammonium-potassium tartrate as anthelmintics in carp 199
N. Peña, A. Auró and H. Sumano (Mexico City, Mexico)

Screening in mice of some medicinal plants used for analgesic purposes in the state of São Paulo 205
L.C. di Stasi, M. Costa, S.L.J. Mendaçolli, M. Kirizawa, C. Gomes and G. Trolin (São Paulo, Brazil)

The vascular action of aqeuous extracts of *Foeniculum vulgare* leaves 213
A.-S. Abdul-Ghani and R. Amin (Birzeit, Israel)

Effects on mice locomotor activity of a narcotic-like principle from *Psidium guajava* leaves 219
G.D. Lutterodt and A. Maleque (Penang, Malaysia)

Wheat rootlet growth inhibition test of Rwandese medicinal plants: active principles of *Tetradenia riparia* and *Diplolophium africanum* 233
L. van Puyvelde, N. de Kimpe, F.-X. Ayobangira, J. Costa, P. Nshimyumukiza, Y. Boily, E. Hakizamungu and N. Schamp (Butare, Rwanda and Gent, Belgium)

Insect-derived crude drugs in the Chinese Song dynasty 247
T. Namba, Y.-H. Ma and K.Inagaki (Toyoma, Japan and Nanjing, China)

Effects of Abana, an Ayurvedic preparation, on rabbit atrium and intestine 287
J.S. Pasnani, K.G. Hemavathi, O.D. Gulati and A.P. Rajani (Barona and Karamsad, India)

Effects of the Chinese herbal medicine 'Saiboku-to' on histamine release from and the degranulation of mouse peritoneal mast cells induced by compound 48/80 303
S. Toda, M. Kimura, M. Ohnishi and K. Nakashima (Osaka, Japan)

SHORT COMMUNICATIONS

Effect of a Kanpo medicine, zyuzentaihotô, on the immune reactivity of tumor-bearing mice 311
M. Hamada, Y. Fujii, H. Yamamoto, Y. Miyazawa, S.M. Shui, Y.C. Tung and N. Yamaguchi (Ishikawa, Japan and Taipei, China)

Eugenia uniflora leaf extract and lipid metabolism in *Cebus apella* monkeys 321
E. Ferro, A. Schinini, M. Maldonado, J. Rosner and G. S. Hirschmann (Asunción, Paraguay)

Activité antiparasitaire d'alcaloïdes bisbenzylisoquinoléiques. I. Activité in vitro sur des promastigotes de trois souches de *Leishmania* 327
A. Fournet, V. Muñoz, A.M. Manjon, A. Angelo, R. Hocquemiller, D. Cortes, A. Cavé and J. Bruneton (La Paz, Bolivia and Châtenay-Malabry and Angers, France)

Activité antiparasitaire d'alcaloïdes bisbenzylisoquionoléiques. II. Activité in vitro sur des epimastigotes de trois souches typifiees de *Trypanosoma cruzi* 337
A. Fournet, A.M. Manjon, V. Muñoz, A. Angelo, J. Bruneton, R. Hocquemiller, D. Cortes and A. Cavé (Angers and Châtenay-Malabry, France)

LETTER TO THE EDITORS 345
MEETING REPORT 349
BOOK REVIEWS 355

SUBJECT INDEX — Volume 24 357
AUTHOR INDEX — Volume 24 359
CONTENTS — Volume 24 361

Volume 25 (1989)

REVIEW PAPERS

Arrow and dart poisons 1
N.G. Bisset (London, U.K.)

Some phytochemical aspects of medicinal plant research 43
R. Verpoorte (Leiden, The Netherlands)

Ethnopharmacology and western medicine 61
J.D. Phillipson and L.A. Anderson (London, U.K.)

RESEARCH PAPERS

An antifungal constituent from the stem bark of *Butea monosperma* 73
B.M. Ratnayake Bandara, N. Savitri Kumar and K.M. Swarna Samaranayake (Peradeniya, Sri Lanka)

New contribution to the ethnopharmacological study of the Canary Islands 77
V. Darias, L. Bravo, R. Rabanal, C. Sánchez Mateo, R.M. González Luis and A.M. Hernández Pérez (Tenerife, Spain)

Hepatoprotective effects of *Wedelia calendulacea* 93
A.K. Sharma, K.K. Anand, P. Pushpangadan, B.K. Chandan, C.L. Chopra, Y.S. Prabhakar and N.P. Damodaran (Coimbatore, India)

Pharmacological study of *Cymbopogon citratus* leaves 103
D. Carbajal, A. Casaco, L. Arruzazabala, R. Gonzalez and Z. Tolon (Havana, Cuba)

Antimicrobial effectiveness of six paradols. 1: A structure activity relationship study 109
J.K. Oloke, D.O. Kolawole and W.O. Erhun (Ile-Ife, Nigeria)

Antimalarial effects of eight African medicinal plants 115
M. Gbeassor, Y. Kossou, K. Amegbo, C. De Souza, K. Koumaglo and A. Denke (Togo, West Africa)

LETTERS TO THE EDITORS 119

ANNOUNCEMENT 125

REVIEW PAPERS

A general outlook on ethnopharmacology 127
P.A.G.M. de Smet and L. Rivier (The Hague, The Netherlands and Lausanne, Switzerland)

Methods for ethnopharmacological field work 139
F.J. Lipp (New York, NY)

RESEARCH PAPERS

Testicular cell population dynamics following palmitine hydroxide treatment in male dogs 151
R.S. Gupta and V.P. Dixit (Jaipur, India)

Studies on the mechanism of action of *Semecarpus anacardium* in rheumatoid arthritis 159
M.N. Saraf, R.B. Goohi and B.K. Patwardhan (Bombay and Pune, India)

Sedating and antipyretic activity of the essential oil of *Calamintha sylvatica* subsp. *ascendens* 165
A.V. Ortiz de Urbina, M.L. Martín, M.J. Montero, A. Morán and L. San Román (Salamanca, Spain)

Antifertility effect of *Bambusa arundinacea* shoot extracts in male rats 173
G. Vanithakumari, S. Manonayagi, S. Padma and T. Malini (Madras, India)

Treatment of chronic liver injury in mice by oral administration of xiao-chai-hu-tang 181
S. Amagaya, M. Hayakawa, Y. Ogihara, Y. Ohta, K. Fujiwara, H. Oka, H. Oshio and T. Kishi (Nagoya, Tokyo and Osaka, Japan)

Anti-inflammatory activity of *Echinops echinatus* 189
B. Singh, S.S. Gambhir, V.B. Pandey and V.K. Joshi (Varanasi, India)
Effects of bamboo buds: structural and functional changes in the epididymis of rats 201
S. Manonayagi, G. Vanithakumari, S. Padma and T. Malini (Madras, India)

SHORT COMMUNICATIONS
Cardiovascular effects in the rat of dihydrocorynantheine isolated from *Uncaria callophylla* 213
P. Chang, Y.K. Koh, S.L. Geh, E. Soepadmo, S.H. Goh and A.K. Wong (Kuala Lumpur, Malaysia)
Effect of an extract of *Erioglossum edule* on the central nervous system 217
M.A. Sattar, E.K. Gan, S.E. Loke, K.F. Mah and W.H. Wong (Penang and Kuala Lumpur, Malaysia)
Effect of *Palicourea marcgravii* on laboratory rodents 221
S.L. Górniak, J. Palermo-Neto and H. de Souza-Spinosa (São Paulo, Brazil)

LETTER TO THE EDITORS 227
BOOK REVIEW 229
LIST OF REFEREES – 1988 231
ANNOUNCEMENTS 233

RESEARCH PAPERS
Inhibition of gastrointestinal release of acetylcholine by quercetin as a possible mode of action of *Psidium guajava* leaf extracts in the treatment of acute diarrhoeal disease 235
G.D. Lutterodt (Penang, Malaysia)
Histoarchitecture of the genital tract of ovariectomized rats treated with an aqueous extract of *Moringa oleifera* roots 249
S. Shukla, R. Mathur and A.O. Prakash (Gwalior, India)
Use of extracts of *Picralima nitida* bark in the treatment of experimental trypanosomiasis: a preliminary study 263
L.O Wosu and C.C. Ibe (Nsukka, Nigeria)
Effects of active compounds isolated from *Angelica shikokiana* on lipid metabolism in fat cells 269
Y. Kimura and H. Okuda (Ehime, Japan)
Biochemical and histological studies of reproductive organs in cyclic and ovariectomized rats supporting a non-hormonal action for neem oil 281
R.K. Tewari, S. Pathak and A.O. Prakash (Gwalior, India)
Mechanisms of hypoglycemic activity of aconitan A, a glycan from *Aconitum carmichaeli* roots 295
H. Hikino, M. Kobayashi, Y. Suzuki and C. Konno (Sendai, Japan)
Pharmacological activity of the essential oil of *Bupleurum gibraltaricum:* anti-inflammatory activity and effects on isolated rat uteri 305
M.A. Ocete, S. Risco, A. Zarzuelo and J. Jimenez (Granada, Spain)
Les phytotherapies anti-infectieuses de la forêt-savane, Senegal (Afrique occidentale) III. Un résumé des substances phytochimiques et l'activité antimicrobienne de 43 species 315
A. Le Grand (Leyden, The Netherlands)
Plants used in traditional medicine in Eastern Tanzania. II. Angiosperms (Capparidaceae to Ebenaceae) 339
S.C. Chhabra, R.L.A. Mahunnah and E.N. Mshiu (Dar es Salaam, Tanzania)

Subject Index Volume 25 361
Author Index Volume 25 363
Contents Volume 25 365

Volume 26 (1989)

REVIEW PAPER

Medicinal plants with hypoglycemic activity 1
A.-U. Rahman and K. Zaman (Karachi, Pakistan)

RESEARCH PAPERS

Antimicrobial activities of some *Ocimum* species grown in Rwanda 57
A.M. Janssen, J.J.C. Scheffer, L. Ntezurubanza and A. Baerheim Svendsen (Leiden, The Netherlands)

Ethnopharmacologic analysis of medicinal plants used by Laotian Hmong refugees in Minnesota 65
M.A. Spring (Minneapolis, MN)

SHORT COMMUNICATION

Indigo from *Eupatorium laeve* 93
G.S. Hirschmann and E. Ferro B. (Asuncion, Paraguay)

Publisher's Note 95

Obituary: Timothy Plowman 97

RESEARCH PAPERS

Study of Rwandese medicinal plants used in the treatment of diarrhoea I
R. Maïkere-Faniyo, L. Van Puyvelde, A. Mutwewingabo and F.X. Habiyaremye (Butare, Rwanda) 101

Effects of the gut-stimulating principle in *Croton penduliflorus* seed oil on the central nervous system
I.U. Asuzu, S.N. Shetty and S.M. Anika (Nsukka, Nigeria) 111

The hepatoprotective principle of *Hypoestes triflora* leaves
L. Van Puyvelde, A. Kayonga, P. Brioen, J. Costa, A. Ndimubakunzi, N. De Kimpe and N. Schamp (Butare, Rwanda and Gent, Belgium) 121

Vascular dilatory action of *Artimesia capillaris* bud extracts and their active constituent
J. Yamahara, G. Kobayashi, H. Matsuda, T. Katayama and H. Fujimura (Kyoto, Japan) 129

Medicinal system of Ladakh, India
I.A. Navchoo and G.M. Buth (Srinagar, India) 137

Medical uses of mylabris in ancient China and recent studies
G.-S. Wang (Beijing, China) 147

Anti-inflammatory activity of some Iraqi plants using intact rats
M.K. Al-Hindawi, I.H.S. Al-Deen, M.H.A. Nabi and M.A. Ismail (Baghdad, Iraq) ... 163

Immunomodulatory compounds from *Picrorhiza kurroa*: isolation and characterization of two anti-complementary polymeric fractions from an aqueous root extract
J.M. Simons, L.A.'t Hart, H. Van Dijk, F.C. Fischer, K.T.D. de Silva and R.P. Labadie (Utrecht, The Netherlands and Nugegoda, Sri Lanka) 169

SHORT COMMUNICATIONS

In vitro and in vivo bronchorelaxant effect in guinea pigs of 'joshina' — a herbal polypharmaceutical
K. Kheterpal, T. Khanna and R.B. Arora (New Dehli, India) 183

Preliminary study of an extract from *Dioda scandens* on some toxic effects of *Echis carinatus* venom
G. Onuaguluchi (Enugu, Nigeria) 189

Pharmacological screening and antimicrobial activity of the essential oil of *Artemesia caerulescens* subsp. *gallica*
A. Morán, M.J. Montero, M.L. Martín and L. San Román (Salamanca, Spain) 197
Studies on some medicinal plants of Senegal: effects on isolated guinea pig ileum
F. Occhiuto, C. Circosta and R. Costa de Pasquale (Messina, Italy) 205
Physicochemical and pharmacological properties of spray-dried powders from *Fraxinus excelsior* leaf extracts
J. Casadebaig, M. Jacob, G. Cassanas, D. Gaudy, G. Baylac and A. Puech (Montpellier, France) 211

REVIEW PAPER
Betel cytotoxicity
S. Sen, G. Talukder and A. Sharma (Calcutta, India) 217

RESEARCH PAPERS
Effect of *Trigonella foenum-graecum* and *Ammi majus* on calcium oxalate urolithiasis in rats
S.K. Ahsan, M. Tariq, A.M. Ageel, M.A. Al-Yahya and A.H. Shah (Riyadh, Saudi Arabia) 249
Effect of Shosaikoto, Daisaikoto and Sannoshashinto (traditional Japanese and Chinese medicines) on experimental hyperlipidemia in rats
M. Umeda, S. Amagaya and Y. Ogihara (Nagoya, Japan) 255
Effect of Shoshaikoto on plasma catecholamines
S. Amagaya and Y. Ogihara (Nagoya, Japan) 271
Chemical and pharmacological studies on *Talauma ovata* St. Hil. (Magnoliaceae)
G.S. Morato, J.B. Calixto, L. Cordeiro, T.C.M. de Lima, E.F. Morato, M. Nicolau, G.A. Rae, R.N. Takahashi, R.M.R. Valle and R.A. Yunes (Florianóplis, Brazil) 277
Lead content of some traditional preparations — "Kushtas"
I. Haq and M. Asghar (Islamabad, Pakistan) 287
Laboratory evaluation of the acaricidal properties of extracts from *Uraria picta* (Leguminosae)
A.C. Igboechi, E.O. Osazuwa and U.E. Igwe (Benin, Nigeria) 293
Use of contraceptive and related plants by the Kapayo Indians (Brazil)
E. Elisabetsky and D.A. Posey (Para, Brazil) 299

SHORT COMMUNICATION
Abortifacient activity of an aqueous extract of *Spondias mombin* leaves
V.N. Offiah and I.I. Anyanwu (Nsukka, Nigeria) 317

BOOK REVIEWS 321

Subject Index — Volume 26 325
Author Index — Volume 26 327
Contents — Volume 26 329

Volume 27 (1989)

RESEARCH PAPERS
Inhibitory effects of *Santolina chamaecyparissus* extracts against spasmogen agonists 1
R.M. Giner, J.L. Ríos and A. Villar (Valencia and Madrid, Spain)

A preliminary investigation of the possible hypoglycaemic activity of *Asteracanthus longifolia* 7
M.R. Fernando, S.M.D.N. Wickramasinghe, M.I. Thabrew and E.H. Karunanayaka (Galle and Colombo, Sri Lanka)

Characterization of anti-complement compounds from *Azadirachta indica* 15
J.M. van der Nat, L.A. 't Hart, W.G. van der Sluis, H. van Dijk, A.J.J. van den Berg, K.T.D. de Silva and R.P. Labadie (Utrecht, The Netherlands and Nugegoda, Sri Lanka)

Screening in mice of some medicinal plants used for analgesic purposes in the State of Sao Paulo Part II 25
M. Costa, L.C. di Stasi, M. Kirizawa, S.L.J. Mendacolli, C. Gomes and G. Trolin (Sao Paulo, Brazil)

Hypoglycemic activity of several seaweed extracts 35
M. Lamela, J. Anca, R. Villar, J. Otero and J.M. Calleja (Santiago de Compostela, Spain)

Traditional phytotherapy among the Sherpas of Helambu, Central Nepal 45
N.K. Bhattarai (Kathmandu, Nepal)

Anti-inflammatory studies on *Euphorbia prostrata* 55
A.K. Singla and K. Pathak (Chandigarh, India)

Ethnobotanical studies in Northwest and Trans-Himalaya. V. Ethno-veterinary medicinal plants used in Jammu and Kashmir India 63
P.K. Sharma and V. Singh (Kashmir, India)

Pharmacological study of certain extracts of *Laurobasidium lauri* 71
M.L. Martin, J.A. Sagredo, J. Morais, M.T. Sánchez, M.A. Sevilla and L. San Roman (Salamanca, Spain and Lisbon, Portugal)

Inhibitory activity of *Jatropha multifida* latex on classical complement pathway activity in human serum mediated by a calcium-binding proanthocyanidin 81
S. Kosasi, L.A. 't Hart, H. van Dijk and R.P. Labadie (Utrecht, The Netherlands)

Anti-inflammatory evaluation of a hydroalcoholic extract of black currant leaves (*Ribes nigrum*) 91
C. Declume (Toulouse, France)

Hippocratic screening of ethanolic extracts from two *Tabernaemontana* species 99
T. Taesotikul, A. Panthong, D. Kanjanapothi, R. Verpoorte and J.J.C. Scheefer (Chiang Mai, Thailand and Leiden, The Netherlands)

Cardiovascular effects of *Tabernaemontana pandacaqui* 107
T. Taesotikul, A. Panthong, D. Kanjanapothi, R. Verpoorte and J.J.C. Scheffer (Chiang Mai, Thailand and Leiden, The Netherlands)

Effect of *Zizyphus sativa* leaves on blood glucose levels in normal and alloxan-diabetic rats 121
K.K. Anand, B. Singh, D. Chand, B.K. Chandan and V.N. Gupta (Jammu Tawi, India)

Ethnopharmacologic investigation of ginger (*Zingiber officinale*) 129
N. Mascolo, R. Jain, S.C. Jain and F. Capasso (Naples, Italy and Jaipur, India)

Effects of cryptolepine alone and in combination with dipyridamole on a mouse model of arterial thrombosis 141
A.O. Oyekan and J.P.O. Okafor (Lagos, Nigeria)

Antidiabetic effects of *Tinospora crispa* in rats 149
H. Noor and S.J.H. Ashcroft (Oxford, U.K.)

Evaluation of the gastric antiulcerogenic effects of *Solanum nigrum, Brassica oleracea* and *Ocimum basilicum* in rats 163
M.S. Akhtar and M. Munir (Faisalabad, Pakistan)

Effect of *Zanthoxylum xanthoxyloides* and some substituted benzoic acids on glucose-6-phosphate and 6-phosphogluconate dehydrogenases in Hbss red blood cells 177
O.A. Osoba, S.A. Adesanya and M.A. Durosimi (Ile-Ife, Nigeria)

Antianoxic action of evodiamine, an alkaloid in *Evodia rutaecarpa* fruit 185
J. Yamahara, T. Yamada, T. Kitani, Y. Naitoh and H. Fujimura (Kyoto, Japan)
Traditional antileukodermic herbal remedies in the Mediterranean area 193
M. Capitanio, E.M. Cappelletti and R. Filippini (Padova, Italy)

SHORT COMMUNICATIONS
Acute microcirculatory changes induced by intravenous administration to rabbits of ptaquiloside, a bracken carcinogen 213
M. Asano, C. Ohkubo, A. Sasaki, I. Hirono, K. Yamada, H. Niwa, and M. Ojika (Nagoya, Japan)
Actions of Chinese herbal medicines *Keishibukuryo-gan* and *Tougakujyouki-to* on the hemolysis and lipid peroxidation of mouse erythrocytes induced by hydrogen peroxide 221
S. Toda, M. Ohnishi and M. Kimura (Osaka, Japan)
Inhibition of chemical carcinogenesis by curcumin 227
K.K. Soudamini and R. Kuttan (Kerala, India)
Biochemical studies on ghalakinoside, a possible antitumor agent from *Pergularia tomentosa* 235
M.S. Al-Said, A. Abu-Jayyab and M.S. Hifnawy (Riyadh, Saudi Arabia)

REVIEW PAPER
A review of natural products and plants as potential antidiabetic drugs 243
M.D. Ivorra, M. Payá and A. Villar (Valencia and Madrid, Spain)

RESEARCH PAPERS
Evaluation of aridanin, a glycoside, and Aridan, an aqueous extract of *Tetrapleura tetraptera* fruit, on *Schistosoma mansoni* and *S. bovis* 277
C.O. Adewunmi and P. Furu (Charlottenlund, Denmark)
Screening of Taiwanese crude drugs for antibacterial activity against *Streptococcus mutans* 285
C.-P. Chen, C.-C. Lin and T. Namba (Taiwan, Rep. of China and Toyama, Japan)
Pharmacology of α/β arteether – a potential antimalarial drug 297
K. Kar, A. Nath, R. Bajpai, G.P. Dutta and R.A. Vishwakarma (Lucknow, India)
Analgesic, antipyretic and anti-inflammatory activity of the essential oil of *Artemisia caerulescens* subsp. *gallica* 307
A. Morán, M.L. Martín, M.J. Montero, A.V. Ortiz de Urbina, M.A. Sevilla and L. San Román (Salamanca, Spain)
Abortifacient potential for the epigeal parts of *Peganum harmala* 319
Z. Shapira, J. Terkel, Y. Egozi and J. Friedman (Tel Aviv, Israel)
Antiandrogenic effects of a flavonoid-rich fraction of *Vitex negundo* seeds: a histological and biochemical study in dogs 327
S.K. Bhargava (Jaipur, India)
Preliminary isolated organ studies using an aqueous extract of *Clivia miniata* leaves 341
D.J.H. Veale, D.W. Oliver, N.S. Arangies and K.I. Furman (Johannesburg and Pretoria, South Africa)

SHORT COMMUNICATIONS
Picrorhiza kurroa, an Ayurvedic herb, may potentiate photochemotherapy in vitiligo 347
K.L. Bedi, U. Zutshi, C.L. Chopra and V. Amla (Jammu, India)
Inhibition of cytotoxic drug-induced vomiting in suncus by a ginger constituent 353
J. Yamahara, H.Q. Rong, Y. Naitoh, T. Kitani and H. Fujimura (Kyoto, Japan)

Subject Index Volume 27 357
Author Index Volume 27 361
Contents Volume 27 363

Volume 28 (1990)

REVIEW PAPER

South American *Strychnos* species. Ethnobotany (except curare) and alkaloid screening 1
J. Quetin-Leclercq, L. Angenot and N.G. Bisset (Liège, Belgium and London, U.K.)

RESEARCH PAPERS

Central nervous system studies on an ethanol extract of *Acorus calamus* rhizomes 53
S.B. Vohora, S.A. Shah and P.C. Dandiya (New Delhi, India)

A new phytochemical survey of Malaysia V. Preliminary screening and plant chemical studies 63
L.E. Teo, G. Pachiaper, K.C. Chan, H.A. Hadi, J.F. Weber, J.R. Deverre, B. David and T. Sévenet (Kuala Lumpur, Malaysia and Gif-sur-Yvette, France)

Plant-derived sweetening agents: saccharide and polyol constituents of some sweet-tasting plants 103
R.A. Hussain, Y.-M. Lin, L.J. Poveda, E. Bordas, B.S. Chung, J.M. Pezzuto, D.D. Soejarto and A.D. Kinghorn (Chicago, IL, San José, Costa Rica and Seoul, Korea)

Stability of cannabinoids in dried samples of cannabis dating from around 1896–1905 117
D.J. Harvey (Oxford, U.K.)

SHORT COMMUNICATION

Antibacterial activity of the leaves of *Phyllanthus discoideus* 129
J.L. Mensah, I. Lagarde, C. Ceschin, G. Michel, J. Gleye and I. Fouraste (Abidjan, Côte d'Ivoire and Toulouse, France)

BOOK REVIEWS 135
ANNOUNCEMENTS 141

RESEARCH PAPERS

Preliminary psychopharmacological evaluation of *Ocimum sanctum* leaf extract 143
M.R. Sakina, P.C. Dandiya, M.E. Hamdard and A. Hameed (New Delhi, India)

Screening of *Icacina trichantha* extracts for pharmacological activity 151
I.U. Asuzu and E.E. Ugwueze (Nsukka, Nigeria)

Preliminary toxicity studies on ethanol extracts of the arterial parts of *Artemisia abyssinica* and *A. inculta* in mice 157
S. Qureshi, A.M. Ageel, M.A. Al-Yahya, M. Tariq, J.S. Mossa and A.H. Shah (Riyadh, Saudi Arabia)

Paraguayan medicinal Compositae 163
G. Schmeda-Hirschmann and E. Bordas (Ascunción, Paraguay)

Post-testicular antifertility effects of *Abrus precatorius* seed extract in albino rats ... 173
R. Sinha (Jaipur, India)

Changes in sensitivity of the isolated guinea-pig vas deferens induced by a lyophilized *Phoradendron latifolium* leaf infusion 183
A. Queiroz-Neto and I. Melito (São Paulo, Brazil)

Ethnobotanical inventory of medicinal plants used by the Guaymi Indians in Western Panama. Part II 191
L.G. Joly, S. Guerra, R. Séptimo, P.N. Solís, M.D. Correa, M.P. Gupta, S. Levy, F. Sandberg and P. Perera (Panama, Republic of Panama and Uppsala, Sweden)
Analgesic activity of certain flavone derivatives: a structure-activity study 207
P. Thirugnanasambantham, S. Viswanathan, C. Mythirayee, V. Krishnamurty, S. Ramachandran and L. Kameswaran (Madras, India)
Effect of aloes on blood glucose levels in normal and alloxan diabetic mice 215
M. Ali Ajabnoor (Jedda, Saudi Arabia)
Rat toxicity studies with β-sitosterol 221
T. Malini and G. Vanithakumari (Madras, India)
Pharmacokinetics of the total triterpenic fraction of *Centella asiatica* after single and multiple administrations to healthy volunteers. A new assay for asiatic acid 235
R. Grimaldi, F. De Ponti, L. D'Angelo, M. Caravaggi, G. Guidi, S. Lecchini, G.M. Frigo and A. Crema (Milan and Pavia, Italy)

SHORT COMMUNICATIONS
Lesser-known herbal remedies as sold in the market at Murcia and Cartagena (Spain) 243
M.D. Alcazar, C. Garcia, D. Rivera and C. Obon (Murcia, Spain)
Glycolytic enzyme activities of human and bovine spermatozoa treated in vitro with solasodine 249
U. Kanwar, A. Batla, S.N. Sanyal and A. Ranga (Chandigarh, India)

RESEARCH PAPERS
Plants used in traditional medicine in Eastern Tanzania. III. Angiosperms (Euphorbiaceae to Menispermaceae) 255
S.C. Chhabra, R.L.A. Mahunnah and E.N. Mshiu (Dar es Salaam, Tanzania)
Pharmacological activities of *Grewia bicolor* roots 285
A.-E.H. Mohamed, M.A. Karrar, A.-E.M. Salih, A.K. Bashir, M.B. Ali and S.A. Khalid (Khartoum, Sudan)
Antispermatogenic action of *Celastrus paniculatus* seed extract in the rat with reversible changes in the liver 293
P.P. Bidwai, D. Wangoo and N. Bhullar (Chandigarh, India)
Studies on *Ruta chalepensis*, an ancient medicinal herb still used in traditional medicine 305
M.S. Al-Said, M. Tariq, M.A. Al-Yahya, S. Rafatullah, O.T. Ginnawi and A.M. Ageel (Riyadh, Saudi Arabia)
Effect of *Crataeva nurvala* in experimental urolithiasis 313
P. Varalakshmi, Y. Shamila and E. Latha (Madras, India)
In vitro antibacterial activities of three plants used in traditional medicine in Sierra Leone 323
C.A. Macfoy and E.I. Cline (Sierra Leone, West Africa)
Effects of *Palicourea marcgravii* leaf extract on some dopamine-related behaviors of rats 329
S.L. Górniak, J. Palermo-Neto and H. de Souza-Spinosa (São Paulo, Brazil)
Concentrations of Na^+ and K^+ in serum and uterine flushings of ovariectomized, pregnant and cyclic rats when treated with extracts of *Hibiscus rosa sinensis* flowers 337
A.O. Prakash, A. Mathur, H. Uehta and R. Mathur (Gwalior, India)
Effects of Shosaikoto, an oriental herbal medicinal mixture, on age-induced amnesia in rats 349
S. Amagaya, S.H.M. Umeda and Y. Ogihara (Nagoya, Japan)

Effects of Shosaikoto, an oriental herbal medicinal mixture, on restraint-stressed mice 357

Subject Index Volume 28 365
Author Index Volume 28 367
Contents Volume 28 369

Volume 29 (1990)

RESEARCH PAPERS

Ayurvedic treatment of obesity: a randomised double-blind, placebo-controlled clinical trial 1
P. Paranjpe, P. Patki and B. Patwardhan (Pune, India)

Combretodendron africanum bark extract as an antifertility agent. I: Estrogenic effects in vivo and LH release by cultured gonadotrope cells 13
T. Benie, A. El Izzi, C. Tahiri, J. Duval and M.-L. Thieulant (Abidjan, Ivory Coast and Rennes, France)

Evaluation of turmeric (*Curcuma longa*) for gastric and duodenal antiulcer activity in rats 25
S. Rafatullah, M. Tariq, M.A. Al-Yahya, J.S. Mossa and A.M. Ageel (Riyadh, Saudi Arabia)

Effect of a preparation from *Viscum album* on tumor development in vitro and in mice 35
G. Kuttan, D.M. Vasudevan and R. Kuttan (Kerala, India)

Antagonistic effect of *Eryngium creticum* extract on scorpion venom in vitro 43
F.U. Afifi, S. Al-Khalil, M. Aqel, M.H. Al-Muhteseb, M. Jaghabir, M. Saket and A. Muheid (Amman, Jordan)

Preliminary evaluation of extracts of *Alstonia scholaris* bark for in vivo antimalarial activity in mice 51
M. Gandhi and V.K. Vinayak (Chandigarh, India)

Contemporary use of bark for medicine by two Salishan native elders of southeast Vancouver Island, Canada 59
N.J. Turner and R.J. Herbda (Victoria, Canada)

Analgesic activity of *Cassia alata* leaf extract and kaempferol 3-*O*-sophoroside 73
S. Palanichamy and S. Nagarajan (Thanjavur and Tiruchirapalli, India)

Vasodilatory active principles of *Sophora flavescens* root 79
J. Yamahara, G. Kobayashi, M. Iwamoto, T. Chisaka, H. Fujimura, Y. Takaishi, M. Yoshida, T. Tomimatsu and Y. Tamai (Kyoto, Tokushima and Kurashikimachi Nakajyo-cho Niigata, Japan)

Gastroprotective effects of an aqueous extract of *Entandrophragma utile* bark in experimental ethanol-induced peptic ulceration in mice and rats 87
T.A. John and A.O. Onabanjo (Lagos, Nigeria)

Antiulcerogenic and antiinflammatory studies with Shilajit 95
R.K. Goel, R.S. Banerjee and S.B. Acharya (Varanasi, India)

SHORT COMMUNICATIONS

Induction of neutrophil accumulation by the Chinese herbal medicine "Ninjin-youei-to" 105
S. Toda, M. Kimura and M. Ohnishi (Osaka, Japan)

Antimicrobial activity of some American algae 111
R.M. Perez G., J.G. Avila A., S. Perez G. and G. Martinez C. (Mexico, Mexico)

RESEARCH PAPERS

Effect of *Allium sativum* on epididymal spermatozoa, estradiol-treated mice and general toxicity 117
A.M. Al-Bekairi, A.H. Shah and S. Qureshi (Riyadh, Saudi Arabia)

In vitro cytotoxicity of polyindolenine alkaloids on rat hepatoma cell lines. Structure activity relationships 127
Y. Adjibadé, H. Saad, B. Kuballa, J.P. Beck, T. Sévenet, P. Cabalion and R. Anton (Illkirch, Strasbourg and Gif-sur-Yvette, France)

A survey of plant crude drugs of Rayalaseema, Andhra Pradesh, India 137
N. Nagaraju and K.N. Rao (Andhra Pradesh, India)

A survey of medicinal plants of Minas Gerais, Brazil 159
G. Schmeda Hirschmann and A.R. de Arias (Asuncion, Paraguay)

Antiulcer action of *Sophora flavescens* root and an active constituent. I 173
J. Yamahara, M. Mochizuki, H. Fujimura, Y. Takaishi, M. Yoshida, T. Tomimatsu and Y. Tamai (Kyoto, Tokushima and Niigata, Japan)

Nutmeg oil: identification and quantitation of its most active constituents as inhibitors of platelet aggregation 179
J. Janssens, G.M. Laekeman, L.A.C. Pieters, J. Totte, A.G. Herman and A.J. Vlietinck (Antwerp, Belgium)

Behavioral effects of *Euphorbia hirta* L.: sedative and anxiolytic properties 189
M.-C. Lanhers, J. Fleurentin, P. Cabalion, A. Rolland, P. Dorfman, R. Misslin and J.-M. Pelt (Metz, Strasbourg and Paris, France)

Analysis of a thread used in the Kshara Sutra treatment in the Ayurvedic medicinal system 199
M.B. Gewali, U. Pilapitiya, M. Hattori and T. Namba (Toyama, Japan and Maharagama, Sri Lanka)

Protective effects of *Garcinia kola* seed extract against paracetamol-induced hepatotoxicity in rats 207
A. Akintonwa and A.R. Essien (Lagos, Nigeria)

New or uncommon uses of several medicinal plants in some areas of Central Italy 213
M.L. Leporatti and A. Pavesi (Rome, Italy)

Effects of *Himanthalia elongata* on the central nervous system of mice 225
J.M. Anca, M. Lamela, I. Cadavid and J.M. Calleja (Santiago de Compostela, Spain)

SHORT COMMUNICATIONS

Trypanocidal effect of an aqueous extract of *Acalypha hispida* leaves 233
E.O. Okanla, J.A. Owoyale and J.A. Akinyanju (Ilorin, Nigeria)

Antiinflammatory effect of lapachol 239
E.R. de Almeida, A.A. da Silva Filho, E.R. dos Santos and C.A.C. Lopes (Pernambuco, Brazil)

CORRIGENDUM 243

REVIEW PAPER

Mucilaginous plants and their uses in medicine 245
J.F. Morton (Miami, FL)

RESEARCH PAPERS

Ginger (*Zingiber officinale*) in migraine headache 267
T. Mustafa and K.C. Srivastava (Odense, Denmark)

New experimental model for the evaluation of adaptogenic products 275
U. Ramachandran, H.M. Divekar, S.K. Grover and K.K. Srivastava (Delhi, India)

New procedure for direct bioautographic TLC assay as applied to a tincture of *Ranunculus bulbosus* 283
N. Didry, L. Dubreuil and M. Pinkas (Lille, France)
Topical antiinflammatory effects of *Euphorbia prostrata* on carrageenan-induced footpad oedema in mice 291
A.K. Singla and K. Pathak (Chandigarh, India)
Plants used in traditional medicine in Eastern Tanzania. IV. Angiosperms (Mimosaceae to Papilonaceae) 295
S.C. Chhabra, R.L.A. Mahunnah and E.N. Mshiu (Nairobi, Kenya and Dar es Salaam, Tanzania)
Effect of *Desmodium adscendens* fraction 3 on contractions of respiratory smooth muscle 325
M.E. Addy and J.F. Burka (Legon, Ghana and Charlottetown, Canada)

SHORT COMMUNICATIONS
Antifungal activity of *Cassia alata* leaf extract 337
S. Palanichamy and S. Nagarajan (Thanjavur and Tiruchirapalli, India)
Intestinal motility enhancing effect of *Atractylodes lancea* rhizome 341
J. Yamahara, H. Matsuda, Q. Huang, Y. Li and H. Fujimura (Kyoto, Japan)

ANNOUNCEMENTS 345

Subject Index Volume 29 347
Author Index Volume 29 349
Contents Volume 29 351

Volume 30 (1990)

RESEARCH PAPERS
Plants in the traditional medicine of the Ubaye Valley 1
R. Novaretti and D. Lemordant (Marseille and Paris, France)
Effects of an aqueous extract of *Ferula ovina* on rabbit and guinea pig smooth muscle 35
S. Al-Khalil, M. Aqel, F. Afifi and D. Al-Eisawi (Amman, Jordan)
Pharmacology of an Indian-snuff obtained from Amazonian *Maquira sclerophylla* 43
J.E. De Carvalho and A.J. Lapa (São Paulo, Brazil)
Plants used in Guatemala for the treatment of gastrointestinal disorders. 1. Screening of 84 plants against enterobacteria 55
A. Caceres, O. Cano, B. Samayoa and L. Aguilar (Guatemala City, Guatemala)
Quantitative estimation of *Holarrhena antidysenterica* bark total alkaloids in crude drugs and in the body fluids of man and rat 75
R.K. Dwivedi and R.K. Sharma (Varanasi, India)
Induction of neutrophil accumulation by Chinese herbal medicines "Hochu-etsuki-to" and "Jyuzen-daiho-to" 91
S. Toda, M. Kimura and M. Ohnishi (Osaka, Japan)
Effect of *Melothria maderaspatana* on carbon tetrachloride-induced changes in rat hepatic microsomal drug-metabolizing enzyme activity 97
K.A.P.W. Jayatilaka, M.I. Thabrew and D.J.B. Perera (Galle, Sri Lanka)
Intestinal smooth muscle spasmolytic actions of the aqueous extract of the roots of *Taverniera abyssinica* 107
B.K. Noamesi, M. Bogale and E. Dagne (Kumasi, Ghana and Addis Ababa, Ethiopia)

SHORT COMMUNICATION

Tabernaemontana crassa as a traditional local anesthetic agent 115
I.E. Agwu and P.A. Akah (Nsukka, Nigeria)

RESEARCH PAPERS

Anisodamine increases blood flow to the retina-choroid and protects retinal and pancreatic cells against lipid peroxidation 121
S.-L. Zhang, D. Lax, Y. Li, E. Stejskal, R.V. Lucas Jr., and S. Einzig (Beijing, China and Minneapolis, MN)

Effects of chronic oral administration in mice of the gut-stimulating crystals of *Croton penduliflorus* seed oil 135
I.U. Asuzu, S.N. Shetty and S.M. Anika (Nsukka, Nigeria)

Hepatoprotective effects of astraglus root 145
Z.-L. Zhang, Q.-Z. Wen and C.-X. Liu (Tianjin, China)

Hypotensive action of a *Coscinium fenestratum* stem extract 151
G.B. Singh, S. Singh, S. Bani and S. Malhotra (Jammu Tawi, India)

Ethnopharmacology of rhinoceros horn. I: Antipyretic effects of rhinoceros horn and other animal horns 157
P.P.-H. But, L.-C. Lung and Y.-K. Tam (Shatin, Hong Kong)

Molluscicidal trials and correlation between the presence of *Tetrapleura tetraptera* in an area and the absence of the intermediate hosts of schistosomiasis and fascioliasis in Southwest Nigeria 169
C.O. Adewunmi, P. Furu, B.B. Marquis, M. Fagbola and O.A. Olatunji (Ile-Ife, Nigeria and Charlottenlund, Denmark)

Pharmacological assay of *Casearia sylvestris*. I: Preventative anti-ulcer activity and toxicity of the leaf crude extract 185
A.C. Basile, J.A.A. Sertié, S. Panizza, T.T. Oshiro and C.A. Azzolini (São Paulo, Brazil)

Effect of *Momordica charantia* fruit juice on streptozotocin-induced diabetes in rats 199
E.H. Karunanayake, S. Jeevathayaparan and K.H. Tennekoon (Colombo, Sri Lanka)

A hypotensive procyanidin-glycoside from *Rhamnus lycioides* ssp. *lycioides* 205
M.C. Terencio, M.J. Sanz and M. Payá (Valencia, Spain)

Effects of fig latex on lipid peroxidation and CCl_4-induced lipid peroxidation in rat liver 215
Z.A.F. Al-Bayati and A.H. Alwan (Baghdad, Iraq)

SHORT COMMUNICATIONS

Screening of *Artemisia absinthium* for antimalarial effects on *Plasmodium berghei* in mice: A preliminary report 223
M.M. Zafar, M.E. Hamdard and A. Hameed (New Delhi, India)

Trypanocidal potentials of African woody plants: in vitro trial of *Khaya grandifoliola* seed extracts against *Trypanosoma brucei brucei* 227
O.A. Owolabi, B. Makanga, E.W. Thomas, D.H. Molyneux and R.W.A Oliver (Salford, U.K. and Makerere, Uganda)

REVIEW PAPER

Records of usage or assays in *Phyllanthus* (Euphorbiaceae) I. Subgenera *Isocladus, Kirganelia, Cicca* and *Emblica* 233
D.W. Unander, G.L. Webster and B.S. Blumberg (Philadelphia, PA and Davis CA)

RESEARCH PAPERS

Possible regeneration of the islets of Langerhans in streptozotocin-diabetic rats given *Gymnema sylvestre* leaf extracts 265
E.R.B. Shanmugasundaram, K.L. Gopinath, K. Radha Shanmugasundaram and V.M. Rajendran (Madras, India)

Use of *Gymnema sylvestre* leaf extract in the control of blood glucose in insulin-dependent diabetes mellitus 281
E.R.B. Shanmugasundaram, G. Rajeswari, K. Baskaran, B.R. Rajesh Kumar, K. Radha Shanmugasundaram and B. Kizar Ahmath (Madras, India)

Antidiabetic effect of a leaf extract from *Gymnema sylvestre* in non-insulin-dependent diabetes mellitus patients 295
K. Baskaran, B. Kizar Ahamath, K. Radha Shanmugasundaram and E.R.B. Shanmugasundaram (Madras, India)

Effects of *Morinda lucida* leaf extract on *Trypanosoma brucei brucei* infection in mice 307
I.U. Asuzu and C.N. Chineme (Nsukka, Nigeria)

SHORT COMMUNICATION

Induction of neutrophil accumulation by red ginseng 315
S. Toda, M. Kimura and M. Ohnishi (Osaka, Japan)

Subject Index — Volume 30 319
Author Index — Volume 30 321
Contents — Volumes 11—30 323